## STATE OF CALIFORNIA

## MEETING OF THE

## CALIFORNIA INSPECTION & MAINTENANCE REVIEW COMMITTEE

Tuesday, May 29, 2007

California Environmental Protection Agency

1001 I Street, Coastal Hearing Room, Second Floor

Sacramento, California

	MEMBERS PRESENT:
2	GIDEON KRACOV, Acting Chair
3	ELDON HEASTON
4	JOHN HISSERICH
5	BRUCE HOTCHKISS
6	ROGER NICKEY
7	JEFFREY WILLIAMS
8	DENNIS DECOTA
9	DEAN SAITO
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11	MEMBERS ABSENT:
12	PAUL ARNEY
13	Al "SKIP" SOLORZANO
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15	ALSO PRESENT:
16	ROCKY CARLISLE, Executive Officer
17	STEVE GOULD, IMRC Consultant
18	JANET BAKER, Administrative Staff
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## PROCEEDINGS

CHAIR KRACOV: I call to order the May 29<sup>th</sup>, 2007 meeting of the California Inspection and Maintenance Review Committee. Why don't we do a quick roll call from my left?

MEMBER HEASTON: Eldon.

MEMBER NICKEY: I guess we're going to share a mic. Roger Nickey.

MEMBER HISSERICH: John Hisserich.

MEMBER WILLIAMS: Jeffrey Williams.

CHAIR KRACOV: Gideon Kracov.

MEMBER DECOTA: Dennis DeCota.

MEMBER HOTCHKISS: Bruce Hotchkiss.

Saito, to come. He'll be here in a few minutes. You may notice some changes up here. I just very briefly want to mention that our acting chair, Ms. Lamare, is cutting back on her commitments, regretfully, and has elected not to seek reappointment. We have a new member in her place, Dean Saito, who you'll meet in a few moments. We were really lucky to have Jude for the four years that she was here, a really hardworking and diligent Committee Member and a really good chair, albeit, for not long enough. The Committee will miss having you up here, Jude, the strong environmental commitments that you have and the air quality expertise. And we'll hear more about that later at this

CHAIR KRACOV: Okay. And we're waiting for our new member, Mr.

meeting or in the future. But we're very lucky to have a real terrific replacement for Jude and we'll meet Dean shortly. It's tough coming back from a Memorial Day and having a fire alarm and a real full agenda today, but we're going to try to get started. Just a quick announcement, apparently our webcast is not functioning. We regret that and we're going to try to get that up and running if possible today and if not, surely we're going to have it ready for our next meeting.

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ALL MEMBERS:

Aye.

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That being said, has anyone had a chance to look CHAIR KRACOV: at the minutes of our last meeting of April 24<sup>th</sup>? wondering if there's any motion to approve those minutes.

MEMBER DECOTA: Motion to approve, Dennis DeCota.

John Hisserich, second. MEMBER HISSERICH:

CHAIR KRACOV: Okay. Any opposition to that? Seeing none, the minutes are approved. We have an agenda today, a pretty full agenda. Has everyone on the Committee -

MR. CARLISLE: Mr. Chairman, point of order, we have to take a vote on that.

CHAIR KRACOV: Okay, I'm starting roughly here. So we'll vote on the minutes for the April 24<sup>th</sup> meeting. Everyone say aye?

CHAIR KRACOV: Any no's? Okay, so they're approved.

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CHAIR KRACOV: It's a full agenda today. We have a pretty
eagerly awaited presentation on the RSD. I understand that
we may have to take that later out of order, so we're
probably move some things up. Are there any changes or
questions about the agenda?

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CHAIR KRACOV: Okay, hearing none, why don't we move forward with Item No. 3, the BAR update, and Chief Mehl. Thank you. Thank you and it's always a pleasure to come here and present to you. I have some very good news and that is on Thursday, the Governor appointed Debbie Bailum (phonetic) to the new Assistant Chief for Smog Check and Engineering and Debbie comes to us from both a State background through Board of Equalization, as well as through private consulting through a company called VIP. And Debbie is very knowledgeable in the IT world and will be able to shepherd us through this whole BAR analyzer process and she's onboard and ready to go and we're very excited about the background that she brings and the knowledge and the skills that she brings in order to move forward with all the projects that BAR has out there in the IT world, so this is very exciting news for all of us. Other than that, BAR continues to move forward and we're doing a lot of kind of painting and different housekeeping things out at BAR and sprucing it up

a little bit. We're giving it a more of a professional atmosphere and I think reflecting that professional attitude out at BAR. And we are working very closely with Sacramento Air Quality Management District on the annual testing of automobiles and the bill that they have out there and providing lots of information and documentation to Assemblyman Jones' staff on the bill, moving forward with kind of fiscal analysis on all of the SIP and the implementation of all of the SIP ideas that are coming forward through ARB and trying to work out a financial plan of how we can actually fund all of those ideas if they do come forward. It's a huge undertaking. As you know, BAR has a general fund loan out and of course money is very tight and budgets are very tight and looking at the repayment of that load in a timely manner I think is going to be a focus of where this money comes from. We really wouldn't be able to go out, I don't believe, and seek additional legislation to change or to increase any fees until that general fund loan is paid back. So right now, it's not on the radars of the legislators and the Governor as they look at the budget, so it's something that they'll have to address in the next couple of years, so we're trying to provide as much fiscal information as we can on all of the proposed SIP ideas. Other than that, any questions? Thank you.

1 CHAIR KRACOV: Is there any public comment on Chief Mehl's 2 updates? Okay. 3 --000--4 CHAIR KRACOV: We could go on to the BAR update, but I see Mr. 5 Goldstene is not here. Rocky, do we want to push the BAR 6 update - I mean, not the BAR, the ARB update to later? 7 Okay, so we'll move that to later. 8 Sorry for the confusion, Mr. Chairman. We just MR. CARLISLE: 9 had Dean Saito sworn in, so it's been a little hectic 10 morning. 11 CHAIR KRACOV: Yes, well, the ARB update, as well as Item No. 5, 12 the presentation on Remote Sensing Device Report; ARB, BAR, 13 and ERG, we're going to move that to after Dr. Williams' 14 presentation, Rocky? Okay. MR. CARLISLE: Yes and we need to do both of those presentations 15 16 consecutively, rather than split them up -17 CHAIR KRACOV: Okay. 18 MR. CARLISLE: - because they are tied together. 19 CHAIR KRACOV: And somebody from BAR - I'm not sure if Chief 20 Mehl can stick around, but Mr. Coppage or someone's going to 21 be here for that presentation? 22 MR. CARLISLE: Yes. 23 CHAIR KRACOV: Okay. So we're going to move forward then to 24 Items No. 6 and 7 to the presentations by our esteemed

Committee Member, Dr. Jeffrey Williams. Are you ready to go

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MEMBER WILLIAMS:

there's no clicker.

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25 CHAIR KRACOV:

CHAIR KRACOV: We're happy to have you.

on those or do you need a few minutes?

CHAIR KRACOV: Hey, it's a long holiday weekend.

then Dr. Williams will have the floor.

We have another technical problem in that

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the floor, we have a new Committee Member just appointed,

who I would to introduce himself. He's a new face on this

in Smog Check. It's a real thrill and a great opportunity

for this Committee to have you, Dean, and you've got big

MEMBER SAITO: Thank you, Gideon. Yes, it is quite an honor to

side, but certainly a very familiar face to those interested

shoes to fill, I'll tell you that. But that being said, can

you just introduce yourself and maybe say a couple words and

be appointed on the Board by the Senate. I just hope I can

fill the shoes of Jude Lamare to halfway as what she's done.

I'd just like to acknowledge the work that Jude has done and

Vic Weisser in terms of refocusing the Smog Check Program as

protection measure. So I really - I'm going to continue in

an air quality control measure as opposed to a consumer

that mode and it's a pleasure being here. Thank you.

CHAIR KRACOV: Jeffrey, if I could just - before Jeffrey takes

And with that, Dr. Williams, you have the floor.

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I'll have the floor for a little while here as MEMBER WILLIAMS: there are really two presentations. This is a pair and it was prompted by a dataset that our newest Committee Member provided me about smoking vehicles in Los Angeles and we'll talk about that more explicitly in the second presentation. It raised the question, if we're going to talk about smoking vehicles in Los Angeles, of comparing them to some other set of vehicles. A comparison set is essential. And that led me to think about the first presentation, which is to give some background on the history of vehicles and so on. want to talk today about the Smog Check Program from the perspective of the vehicle being tested and look at its test history. We so often talk about the Smog Check Program from the perspective of the stations, whether test-only or testand-repair, and I don't expect even to mention the station types today. I've often talked about the Smog Check Program from the perspective of vehicle owners and whether they procrastinate in getting the test done. That's awfully close to the test histories, but I'm not going to talk about the specific owners and trace them very much today. just going to talk about the test histories. And so we can ask this more fundamental question about each of the vehicles, can a vehicle escape its past? Does its previous test history say something about what will happen with the next test? You can think about this from the perspective of

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forecasting what the next test will be and that is the perspective of the high-emitter profile. But I'm looking at I think an even more fundamental question; can we characterize the histories of these vehicles and how many vehicles are there in any one setting. So we might concentrate on some questions like these. Do many vehicles fail repeatedly? How many are in this category or what percent? And especially do the tampers and the gross polluters persist in that category? I don't think we - we have a sense that this can happen, but we don't have any actual statistics and I hope to provide those. Here's the other side of the coin, which is do some older vehicles pass every time? It's sort of sad that they keep going through a Smog Check. They must be well-maintained or a particular model or something. And we might look at this question, too, and actually I think this is the most fundamental new issue, which is are the test histories related to which vehicles are retired? And I want to get into that because if this is true, then there's another effect of the Smog Check Program perhaps, which is it's forcing the owners of vehicles to confront the fact that the vehicles should be retired. Or at least we'd have to worry about the statistical implications of this. So let's keep these questions in mind as we look at some of the data here. let me talk about the data I'm using. This is really what's

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called the VID, the vehicle - what's that stand for information database. I have all the test records from the 1<sup>st</sup> of January 1998 through March of this year, so it came to 117 million records, give or take a few hundred thousand. History, of course, goes even farther back, but this is when I start and this is quite a long history. Some vehicles have appeared five times in the test. I've deducted from this total records some categories, the major one of which is a training test and there's a special code in the data that says a car was used for training testing and I've taken those out. And for some reason there's some doubled records, which is the very same test twice. I'm not quite sure why that's happening, but I've removed them. I've also removed some implausible VINs and plates because that's not really - something else is going on. And not very many of these, and I'll explain later how I removed them, but just to give you an example, there's some test records in there where the VIN, the Vehicle Identification Number, which should be this 17-digit combination of letters and numbers is instead QWERTY and the license plate is 1234567 and that's clearly not a real vehicle. Something else is going on, it was probably a testing of the machine. I've removed those. I've also removed VINs, even they look to be valid VINs, where the only record we have is an aborted test. that's not very many of these records anyway. So I'm left

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with 116 million records that grows by about one million every month, so the next time I'm back I'll probably have April and May in and we'll have another two million records. Here's the main result I can report, which is how many vehicles does this represent? Well, the answer is of these 116 million tests were done on just slightly over 30 million different vehicles. That is, I can find a distinct VIN and here is the profile of the model years covered by these Most of them are in the 1990s as you can see and VINs. I'm a little there's some trailing off into the 1970s. puzzled why I don't see more 1973 vehicles because I think they should have been tested in 1998 or '99, but there aren't too many of those anyway. I draw your attention to that there are some vehicles that are model years 2006, 2007 being tested and we don't usually think of them as being in the Smog Check Program. They're usually dealers doing this and there's a fair number of the records in the early model years and the same is true that in, say, 2001, there was some 2000 model years being tested, but they're now part of the regular of tests. You may not be used to thinking about these as distinct vehicles and their test histories, but this is what I've been writing some programs for, so I have sorted the 116 million records by VIN and then by time. you do the math, the average VIN up there, Vehicle Identification Number, has about three or four tests; 116

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divided by 30 million, but of course, the 2007s mostly have only one record and the 1974s don't have very many. average number of records we see for the model years in the middle is about five or six. There's some with even more There's one Volvo, I forget which model year, that's had 155 tests done on it. A lot were on a sequence of the same day, there maybe was a machine failure. weren't the same moment, they were ten minutes apart. don't know why. That's the highest number of tests. vehicles have ten or 12 tests in them and it's these test histories that I want to try to characterize. How many of these vehicles fall into broad patterns of their test histories? To get some sense of how we normally think about these tests versus the full history of each vehicle, I've tried to do what is a normal analysis of these test records. We've heard about the first test in a cycle, so imagine a car that's up for its biennial inspection, it comes in whether it's a directed vehicle or it goes to a test-andrepair and gets a pretest isn't the issue. It's the first test in an identifiable cycle and we normally ask whether it's failed that or passed that. We often hear that there's about a 14 percent failure rate on these so-called initial tests or first tests and I find in the data about that number, 14.22 percent, have failed. Where I've looked at all the test histories and defined a cycle as tests that are

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at least 270 days apart and are not change-of-ownerships, are not what is also called an initial test in the data, but I think we should call an out-of-state vehicle coming in. If we look at these first tests in cycles, we use 55 million of the test records where there are 116 million. argument is that there's some other information in those other test records and if we start thinking about them as tests of the same vehicle. And one of the first things to point out is if you look at each VIN separately and ask did it ever fail a test, that number is 27.86 percent, not whether it failed the test in a particular cycle, which is the 14 percent. So to draw that point home, let's look at some of the vehicles whose histories, whether it's only a single test or it's 155 tests, whether there's ever a fail in that test history, and as I said, 27.86 percent of the vehicles we can see in Smog Check, over these close to ten years, have failed and that seems to me a higher failure rate than we're used to thinking about, which is to say that the vehicles have some history of failure. Have they ever been a gross polluter; 7.71 percent of these vehicles have at some point been a gross polluter. Almost three percent have been categorized as tampered. As you can see, we have almost six percent that have ever been a visual failure. The OBD II I've classified, ever OBD II fail is seven percent, but if you count them up, the OBD II vehicles,

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we're approaching 17 percent have ever had that failure. Now here's a less happy statistic, which is that 15.29 percent of vehicles in their test histories have had an And another somewhat disquieting statistic is that abort. 19.49 percent of the vehicles have only a single test. maybe they're the 2007, but let's look a little more closely at the ones that have had a single test. And this is 5,858,546 vehicles. These are all huge numbers, so one thing I want to say more from my experience working with the data, if it's happening to about 100,000 vehicles, it's something we should notice. We tend to look at vehicles almost anecdotally. If there's a single example, it tells us something. That's fine, but sort of translate it to the amount of data we're working with here, it's got to be important at the 100,000-vehicle mark to really matter, which is hard for someone whose training is to look at each data point to accept, but I'm beginning to realize that fixating on each and every record is perhaps counterproductive. I think people at BAR have long since understood that fact of life, but I'm coming around to it. But I am puzzled by some of the numbers here where we only get a single test. Notice that 2.31 percent of those single tests were fails. They were never resolved with a pass. That's a little concerning. A lot of them are classified as change-of-ownership. It's not that the person necessarily

says that he's having the test done for a change-ofownership, but the testing procedures, because they haven't
seen this vehicle before, say it must be in there because of
a change-of-ownership. I'm very suspicious of these changeof-ownership statistics and that may be skewing how we think
about these tests. Similarly, a number of these vehicles
that have a single test are out of state and, if anything,
that's an underestimate, because sometimes there's no state
at all put in and I'm only counting ones that I can identify
as a state that's not California.

CHAIR KRACOV: These vehicles - Gideon Kracov - these vehicles, when you say single test, they were never tested again; you don't have a record of another?

MEMBER WILLIAMS: There's only - in this whole dataset, that vehicle only appeared once.

MALE: (inaudible - mic not on)

MEMBER WILLIAMS: Yes. Some of the - yes.

MEMBER NICKEY: Could it have been a data entry error?

MEMBER WILLIAMS: It could be and I'm going to come to that explanation. And there are some explanations for this and it fits with some other puzzling things, so let me get all the puzzles ready. One of the puzzles -

MALE: (inaudible - mic not on)

MEMBER WILLIAMS: I don't think I'm going to solve them, but I have some ideas. Let's go back and look at the aborts,

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because this is another puzzle. Of the total number of records, 5.75 percent are aborts. Over six million aborts are in the dataset. And that isn't an occasional abort. There are a lot of aborts. And it's not that they were BAR-90 aborts, they're happening on BAR-97 or with ASM tests. As you can see, 6.56 percent of the ASM tests are aborted. Now, that seems to me a large number and it's possible that what's happening is the abort is being used as a preconditioning device or something or maybe it's about the fail and somebody does something. Well, if that's happening, those cars are - when we actually see them pass or something, we're missing a fail, possibly, right? Now, let's do some math here. Let's say only 20 percent of the aborts are actually a car that's about to fail. that's like a million vehicles in this entire dataset. It's a significant fraction of the total possible failures. all these aborts were 1/100ths of this and there were still 20 percent that were actually failures in the making, I don't think we'd worry, but these numbers are of an order of magnitude to make me worry about whether we're measuring failures correctly. I don't know, I think we ought to look more at why aborts are happening. And if you remember from Emily Wimberger's last presentation, the shops differ very much in the percentage of aborts, so it may just be technician practice. These numbers suggest to me that we

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ought to figure out what's happening there. The numbers themselves don't say, except this final number here. percentage not retested within 12 hours is 16.17. can read this either way, that a lot of the aborts, there's an immediate test, so something - it just may have been that the machine wasn't ready or something was entered incorrectly about that vehicle and so the test is aborted. That's fine. A lot of them are happening quickly. why I think it might be an implicit form of preconditioning. But 16.17 of aborts aren't retested until at least a day They might be real fails, I don't know. number is both too big and too small at the same time. There are a lot of aborts and that's another puzzle. here's some more conventional statistics that I hope will get us thinking about how fails accumulate and some basic facts here. So there are over eight million of the 30 million vehicles that have ever had a fail, and then I looked at some characteristics of this fail, and here's some interesting statistics; 28.15 percent of those vehicles had the pass within 12 hours, so basically the same day. maybe I could ask how many passes were in the next hour and we'd get some percentage. It's hard to believe there's a substantive repair occurring for at least some fraction of these vehicles. But on the other end of the spectrum, there are a number of vehicles, 17.34 percent of those that have

ever failed, fail once and then try again in that same cycle, some other shop typically, or maybe the same shop the next day, and fail again. There are quite a few vehicles that are repeat failures because they're trying to get a pass someplace, but they don't. So this is, in ways, good news. But the final category here is a particularly interesting one; the number of fails that are unresolved with a pass in that cycle, 18.85 percent. Now, this could mean that they just say, well, I'm not going to bother to Smog Check anymore and just drive the car. I don't know if that's happening. I think what's more likely is that people (end of recording) -

Tape 1 of 3 - Side B

MEMBER WILLIAMS: - it's going to cost me \$500; time to say goodbye to the car. If that's true, there's a significant fraction of the effect on Smog Check is in this encouragement of retirement, because this happening 18.85 percent of the time to fails. And that's a big number. I'd like to look at another puzzle in the data, but use a couple of examples that actually are smokers in L.A. to see what's a little puzzling, what the puzzle is. Here is a Toyota Corolla and its test history in the data that I have. And notice in May of 1999, it had a pretest and it had a tamper. Does anybody see something puzzling then about the test records, that history? When did it pass? It didn't. It

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appears in October of 2002 with the designation of a changeof-ownership, maybe that's true. I haven't gone and looked at the - Rocky and I can look at the DMV records to see if actually changed title. This is the designation in the VID and this is a gross polluter that in two days has passed. That's possible. In 2004, it was a gross polluter and passed and then in January of this year, it was a tamper and This is clearly a chronic failure and that's interesting. And that it's also a smoker is interesting, but what I find particularly puzzling about this test history is the gaps. You're supposed to have a biennial test every two years and May 1999 to October 2002 is not two years, it's a little longer. And May of '04 to January of '07 is more than two years. I would call this a gap in the history of this vehicle. Here's another vehicle, also a smoker in L.A. I thought I might as well use these as examples as any. Here is a vehicle that in August of 2000 in for a biennial test, failed, and two days later passed. It failed again in June of '02 and took a month to pass. could be a little unhappy that it was driving around polluting in that month, but there are a couple of puzzling things about this vehicle, too. August of 2000 is more than two years after January of 1998, which is when my data Where was the first test? series starts. queried the BAR website where you can put in the VIN or the

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license plate, got the same thing. This car was tested in mid-1997, so there's a three-year gap, where it shouldn't be much more than two years, three months, if somebody's early on one and late on another. It's a bigger gap. I don't know why, maybe it was non-op'd, but there's a gap. actually - it's possible that this car then retired in 2002 and we don't see it again, except it was reported as a smoking vehicle in L.A. in November of 2006, which means where did the 2004 test go? It's not again in my dataset. The BAR query actually tells us that on May  $8^{\text{th}}$  of this year, it got Smog Checked. I don't have that month yet in my dataset, but what it was doing driving around L.A. since November 2006 should make us a little concerned. Now I've reverted to anecdotes by having two cars here, but I wanted to explain what I mean by a gap in the test history with these two examples. What really matters is how many of these gaps there are. And here is my estimate of the overall number of vehicles with gaps in their history out of the 30 million vehicles. And I find that 1.4 million had a gap of three years or more within their histories, where I thought it was supposed to be every two years. And it might be that some of these left the state, so I see them again, there are Nevada plates. Well, I can count some of those, about 62,000 vehicles. Likewise, I see about one million vehicles that have a gap at the start of their history, some model years that should have been test in 1998 or '99. some of these are arriving from out of state, that's fine. You take the arriving from out of state out, there's still about two million vehicles, that's close to ten percent of the total, that have a gap in their history. So I've been looking for how to explain this and I bet others have a theory and Roger seems to have one.

MEMBER NICKEY: Do you have mileage information on any of these?

MEMBER WILLIAMS: Yes, I have some mileage -

MEMBER NICKEY: So it's not like the gappers could have been sitting.

MEMBER WILLIAMS: It could have been and I haven't specifically looked at this, because I'll tell you more about mileage when we get to the smoking vehicles. I'm not using that information here. They could have been sitting, but this is a lot of vehicles to be sitting, it seems to me. If there were 100,000 of these, I'd be happy with that explanation. The explanation I looked for was that perhaps the vehicle had its VIN entered wrong and, where I'm thinking it's two vehicles it's really one, and if we just merge these together, we get a full test history. So I have two vehicles that are puzzling where they've put together, one is puzzling. I have consumed a lot of time testing that theory. I want to tell you a little bit about what I've done. I have written a variety of computer programs to

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check whether VINs look valid and I've passed through the data and I have found about 900,000 records with what I will call a dubious VIN. And then I've tried to make corrections. Let me explain how I made the corrections first, because that's interesting. I used a second piece of information, which is the plate. A plate is not necessarily with the unique vehicle. A VIN is supposedly unique, but if I'm pretty sure the VIN is wrong, I have to look at a secondary source of information and I said, what if the plate looks sensible? And what if I find a valid VIN with that plate and that's the only plate that - that the only VIN that plate went with and if I look at the plate on a dubious VIN and I find it's awfully close to the VIN that I think is right, or I'm sure is right, then I probably have found the correction that I need to make. And you can see an example of something I did with the very first one here, which is a 1988 Chevy Astro and that VIN, the first line, is actually wrong and why it is wrong is that the check digit number, which is the X in the middle in this instance, doesn't fit with all the other numbers and letters. a complicated formula where you convert letters to numbers and then multiply by the place where that digit is in the VIN and you divide the sum of those products by 11 and that remainder is in the check digit and X means the remainder And I can write a computer program, and have was ten.

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written one, that checks those digits and this one is wrong. So it's what I call a dubious VIN, whereas the line below is the correct VIN and look, I had the same plate and there were eight other records with that plate and so I fixed the VIN that looks dubious, so I change the four to a one. That's not a common mistake. And you can see from the other example somebody left off the first number. Visually, I can see what the repair must be to this VIN, but I've written programs to do it and again I'm using that the plate dominates. And I only made these corrections if the VINs were very close, which you can see both of these are. They're only off by one digit. I'll say in passing there's some interesting things about the mistakes that are made. It won't surprise anybody who reads numbers and letters that a lot of people seem to confuse two's with Z's and vice versa and D and C with zero. And another common one was B and eight are misread. Let's see, there's S and five and six and G are the most common of these mistakes and I think it's just a simple misreading of something. I expected there to be a lot of transpositions and that's not very And what is much more common is that if you misread a Z for a two and there's another Z in the VIN, you put in two two's, not two Z's and something like that. I'm pretty sure these are the proper corrections and I'm able to make them for 289 of the dubious VINs, which leaves about 600,000

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unaccounted for. Some of them are only aborts and those are the ones I threw away and so on, so it leaves me about 550,000. some of those look like they're valid VINs after all or valid in the sense that DMV recognizes them. clerks could have typed in a Z for a two or a two for a Z, because there's a whole test history. There are about 250,000 VINs - records, sorry, where there's a dubious VIN and I can't see an obvious correction. I've already made the corrections in all the other things I'm talking about, so we have 250,000 to fill in all the gaps of two million vehicles. Does everybody follow my math? And so that might explain some of the apparent gaps, but it's not going to explain nearly all of it, so I come back to with this that there are a lot of gaps in test histories. I've wondered if maybe I was just missing some data. I randomly put in about 20 of these vehicles with gaps in their history into the BAR website, given their VIN or their license plate, and in 19 of the 20, I got the same test histories that I thought I had and the 20<sup>th</sup>, I missed a record. So let's say it's five percent. There's still going to be a lot of test histories with gaps. And I don't know why, they shouldn't be there. Maybe they're all non-op'd, but that's a lot of non-ops. And why they're - and to find out more, we're going to have to look at the DMV registration records, which is a big project in itself. But this is focusing on some odd

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vehicles that don't seem to have complete histories. know, there are a number of other vehicles that have a full history and so forth. And let's just take an '87 VW Golf as a representative example of one of these exemplary vehicles that has a full test history. Just a random choice here. But even this exemplary vehicle has a number of things that are puzzling about it, not least of which is its fairly erratic time of being tested given that its test due date is the end of September in the cycle, but we've already studied this particular vehicle and it was a motive for the procrastination study after all. But there's some other things that are a little puzzling about this one. all, it's very first test in the dataset was an abort and it was retested at that shop in Palo Alto two days later. abort was at 5:30, did they just decide not enough time to do this today? Could be. I've mentioned before with this car as an example that change-of-ownership, which is in the data in October of '01, well, this poor car has been unable to escape the past of its owner and its lack of oil changes through the years and so forth. It would probably happily have changed owners, but it didn't. So how this is classified as a change-of-ownership, I don't understand. So even this exemplary vehicle has some questions about the data that we want to look at, but it does have a consistent set of tests, which are all the biennial tests.

tried to look at the persistence of vehicles as a major question and so I've defined a pure pass as not having an abort and obviously not having a fail in front of it. goes in and passes. And there are 18.88 percent of all the vehicles in the data have had four or more cycles with a So it has to be an older vehicle to have consecutive pass. had that many test cycles, but there are a lot of them, and some of vehicles, close to 2.5 million have passed five straight times, so there are a lot of persistence in passing. There's also a lot of persistence in failing; 27.93 percent of all vehicles ever to fail have failed in two or more cycles, seven percent in three or more and there are close to 100,000 vehicles that have managed to fail four times. That seems to me quite persistence in failure, And it's those last vehicles that I think we are all right? most concerned about and the point is, there are a lot of So my 100,000 minimum is set by this group. them. almost done with facts about these vehicles and I want us to concentrate now on '76 to 1995 because we have a lot of vehicles going out and a lot of vehicles coming in and that sort of confuses the matter. So here's a plot of the number of vehicles and implicitly also their fail rates, which the red versus the green, of vehicles that were tested in 1998 and '98 for these model years. And you can see that there aren't very many model vehicles from the late `70s and early

They've retired. Okay, I'm taking these same vehicles and asking what's happened three or four cycles later; 2004, 2005. If I had the rest of 2007, I'd do it one more cycle, but here's what's left. Almost half of the vehicles from these model years that we saw in 1998 and 1999 aren't there in 2004 and 2005. The attrition is considerable. We're getting new vehicles all the time because of newer model years and also because some of these model years come in from out of state. On average, about 12 percent of the number of the vehicles, so that's about close to two million vehicles of these model years entered from out of state in this period, which is masking how many of the original ones are actually retiring. And it's a considerable fraction. And notice that the older model years disproportionately left, which is not surprising; they're the older cars. But also notice that of the ones that remain in 2004 and 2005 had a failure rate in '98 and '99 that was seven percent versus 10.5 percent. vehicles that failed in '98 and '99 disproportionately left over the next six years. And this is very, very important for our understanding of what Smog Check does and what we deduce about what we can use to predict whether a vehicle will fail. I'd like to make that point with an example, and then we'll look at the overall effect. So here are the '87 VWs and Audis, I put them all together, versus the '87

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Mercedes that were tested in 1998 and '98. There were again about half as many VWs as Mercedes, 12.36 percent of those VWs failed in 1998/99, versus 13.47 of the Mercedes. Mercedes were a little worse, but that's not that different, right? And look how many are remaining by 2004 and 2005; 9,500 VWs, 14,800 Mercedes, 74.3 percent of the Mercedes survived those years and only 34.71 percent of the VWs. Makes sense, why save a VW when you could save a Mercedes, right? It's not surprising at all, but look what this does to the composition of the '87 model year group. It's now gone heavily towards Mercedes. And there's another subtle thing happening. Whether it's the VWs or the Mercedes, the ones that failed in '98 and '99 are disproportionately not there in 2004 and 2005, so the composition has switched from whatever it was in '98 and '99 among these model years and makes to '87 Mercedes that passed. It's not random I'm not saying the Smog Check caused the attrition. retirement, it's related to the reasons of retirement, but it is a very big compositional change and so if we just think about what's happening to the '87 model year, the same logic applies to the '77 model year, we get a very different picture of what is the typical failure rate and why. Let me look at this from the perspective of all vehicles, but behind it is these compositional changes like the Mercedes/VW issue. I have plotted here the failure rate

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among the vehicles tested in 2004 and 2005 that were around in '98 and '99, not the ones that came in from out of state, by model year. We're used to looking at these plots and thinking about them and the general pattern is that is as the car is older and has a higher failure rate, and we're seeing that in this plot, too, but notice how it trails off in very oldest cars, it's close to 20 percent failure rate, but the peak is, what, 1984 or something like that, not This is if we just use the data from 2004/2005. there's a funny thing going on here, right? Those cars that have survived were disproportionately inclined to pass Someplace along the line they may have failed and earlier. then retired. It's rather as if we're studying, say, blood pressure and the affect on health of the elderly and we start doing a study and do a lot of blood pressure readings from those who are 65 to 85 and we wait six or seven years and measure the blood pressure again and plot the blood pressure as a function of age. We're used to thinking of age of humans and not model year of humans, but the 1928 model year is 78, 79 now, right? Something like that. That's the same idea. But when we measure the humans after six years and just take their blood pressure again, we only get to measure the ones that are still around. Well, they may have died because of high blood pressure, directly or indirectly, right? And so we're getting a survivorship that

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is related to the very thing we're trying to measure, which is the relationship between high blood pressure and age, and here we're getting failure rates of model years as a function of high mileage, broken down car, etcetera, etcetera, and we're having a problem there. To get some sense of whether this attrition bias, we might call it, is significant in the data, I thought of this experiment, which is, let's go back and look at the last test cycle for the vehicle, even if it's retired, and act as if that has continued into the present. So it's like the human patient, the last time we measured his blood pressure, that's a recording we use even if he died, so we keep him in the sample. So I'm going to make all 15 million vehicles be in my sample and use the most recent test result, so the ones that have survived to 2004, 2005, their test results, but ones that retired in 2000, their last result I have in 2000 for them I use right? And if it were random what's going on, it would trace over this same line. And if a significant effect of attrition, we'll see a line that's very different. So here's the line this way, it's very different. So the last - the vehicles that are leaving, they may have passed in 2008 and '09, but failed in 2001, and they're gone. And so we get a very different impression of the relationship between model year and failure rates if we use the full test histories. And I think you can see the

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logic applies that if we had test histories before 1998, we get a very different impression of the failure rates for the 1997 - excuse me, the 1977 vehicles and so on. But likely that little light gray line, if we could compute it better for the older cars, would go up straighter, right, so we'd always expect a higher failure rate the older the vehicles. And now that's going to project out to a 60 percent failure rate for '77 vehicles and so on if we could get the full test histories. I think this is a really, really important implication of looking at test histories, that this attrition bias, I call it, the cars are not retiring at They're retiring not at random from the perspective random. of Smog Check. I'm not saying Smog Check causes that, it People might go in an say I've failed my Smog Check, it's not worth repairing, but the very same thing that's causing the car to be junked is related to why it's failing on its Smog Check. Think about how this matters as to how we approach things. We're doing a HEP on only the records that actually exist. We're missing all the ones that retire, but they're an important component. And we know something about them, that they retired. And we know their last test results. I don't think we're using all of that information. I can't say for sure because I still don't know what's going on inside the HEP, despite a number of requests I've made to have us probe into that model.

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another thing that I think is happening here is more relevant. Our common perception of how you say Smog Check has a benefit in air quality is a vehicle is - it fails and then it's fixed and then there's some projection about how long it will last, the saw tooth behavior and so on. There's a large category of vehicles that aren't fixed, they're retired. And that's a benefit of Smog Check, too, directly or indirectly, and we haven't even thought about how to quantify that. But it's a big fraction. If it were a half dozen vehicles, even if there were 100,000 vehicles, we wouldn't care, but it's eight million that something like this is happening to and we need a way of quantifying that. So what are the overall lessons? Again, mostly for us to think about and less answers and further questions, and one is many vehicles have had an aborted test, so much so that we have to really wonder about what is the failure rate that we're always focusing on. Some vehicles have an unexplained gap in the sequence of tests. Are we just missing some, is this an oversight? How are those cars getting a registration? Maybe they're not, we have to look at that. If we look at test histories, the failure rate is not the simple 14 percent that we hear about, it's double that really. Vehicles that have ever failed, and that's the group that we should be concerned about, right? Because if you fail once, how do we know that it was really fixed?

here's a final point, which is the happier side of that.

Vehicles with poor test histories are disproportionately retired and that's good, but they're not all retired. A lot of them fail repeatedly and that's something about the Smog Check program. So I'm ready to take a few questions now about this and then we'll go on to the smoking vehicles.

MEMBER NICKEY: Well, I have this question every time we talk about failure. I get the feeling when you say failure, everybody in the room - when you say failure, that implies tailpipe failure.

MEMBER WILLIAMS: No, I meant F, G, T -

MEMBER NICKEY: Right, right, because half of all failures are visual and functional and it appears to me we're applying the same weight to a tailpipe failure as we're applying to a broken vacuum line and they're two totally different things.

MEMBER WILLIAMS: Yes, and I think you saw from those statistics that the vehicles that have ever had a functional failure is a fairly big percentage.

MEMBER NICKEY: But are those separated out or are we just considering tailpipe failures in all these statistics.

MEMBER WILLIAMS: I tried to separate them out. When I just spoke repeated failure, those statistics, it was just if it failed the test for any reason.

MEMBER NICKEY: So it could have been a broken vacuum line and not a tailpipe failure.

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MEMBER WILLIAMS: I tried to show that there were some visual failures and a significant fraction of the total failures are caused by that. But, yes, I can go and look at - anybody can go in and look at the why they failed and clearly if you had a visual failure on one test and an emissions failure on another, then it's a different pattern than two emissions failures. I just didn't break - MEMBER NICKEY: But doesn't that kind of skew the results?

MEMBER WILLIAMS: I don't think so. We can go look at it a

IR WILLIAMS: I don't think so. We can go look at it a little more closely. Cars are failing for a variety of reasons and if I say they failed four times in a row, it might be different reasons. I didn't look at the subcategory, fail for the same reason.

MEMBER NICKEY: Yeah, because for instance, the same day, pass, fail, pass, many times in our case has been a bad vacuum line. The customer takes the car away in the morning and brings it back in the afternoon fixed, it's a fail in the morning, pass in the afternoon.

MEMBER WILLIAMS: Fine. So what you're asking me to do is not look at a 12-hour window, but a one-hour window?

MEMBER NICKEY: No, I'm just pointing out that there are differences.

MEMBER WILLIAMS: No, there's some legitimate, I'm not questioning that, but this is happening a lot. I'm trying here mostly to get a sense of how common is something (end

of recording) -

Tape 2 of 3 - Side A

MEMBER WILLIAMS: - a couple of vehicles, by a couple, I mean 100,000, had gaps in their test history. I wouldn't spend a lot of time thinking about those.

MEMBER NICKEY: That's why I'd be interested in seeing the mileage. Many people just let them sit.

MEMBER WILLIAMS: Possibly. We could look at the mileage. So a car that has a gap that accumulated 90,000 miles during that three years wasn't sitting. I can go back and look at that.

Always more questions, few answers, right?

CHAIR KRACOV: Bruce?

MEMBER HOTCHKISS: Well, I - one of the things you said I think is correct. You need DMV data. I mean, it seems to me there might be a large number that would go into non-op and I know also in the Bay Area, there seems to be a large number that changed domicile, which I don't know if that's a problem - as big a problem in Southern California, you may know, Dean, but it - I just, you know, randomly with my neighbors, it seems like everybody, everybody has a friend or a relative who has an address in the change-of-ownership area and I - I mean, I can drive around my hometown and point out probably half a dozen vehicles that are in my town, but are registered in Lake County. So I mean that would be very, very interesting to me to see the DMV data on

how many are non-op'd and how many are domiciled in the change-of-ownership areas.

MEMBER WILLIAMS: But this all gets to a broader point and we might put it in this blunt term; we're going to use the HEP as designed, it's using just the test records and we're saying, wait a minute, there's a lot of information about the DMV there that's not used. In fact, we can't really understand the test histories unless we have the DMV records. Fine, but that says the HEP is missing a component that's important. I agree and -

CHAIR KRACOV: I agree.

MEMBER WILLIAMS: - yes, and again, if it were only 100,000 vehicles, a small number like that, we wouldn't worry, but it looks like it's two million. Now someone can come along and say, well, I've got a bug in my computer program and I'm way over-estimating this, but certainly -

CHAIR KRACOV: We still have the public comment.

MEMBER WILLIAMS: Huh?

CHAIR KRACOV: We still have the public comment, so -

MEMBER WILLIAMS: Yeah, we can do that, but as I say, I gave

Rocky 20 vehicles - 12 vehicles that I - were my gapped

vehicles and asked him to see what he could see in the

records and he found the gaps, too. He also was amazed at

how many of them had very dubious pass records. They seem

to go together. The gap vehicles are often ones where

there's been a failure or a tamper and that there's been a gap or there's - including an unresolved pass or a failure that was not resolved with a pass, that's a large number.

Maybe those were retired, but one of them was still driving around L.A. last November.

CHAIR KRACOV: Mr. Saito?

MEMBER SAITO: Anecdotally, in my past lives, we've always heard where we've attended events to provide let's say a free Smog Check in low-income areas. We always hear anecdotally that there's a lot of change-of-ownerships of these older vehicles and the suspicion is that they've always - they've had a dubious history. Is there any way from the data that you've looked at that we can - I guess, that's where we would have to tap into the DMV database to see what kind of change-of-ownership history we've had on those vehicles and that's what we're going to hope we can that access to.

MEMBER WILLIAMS: Yes, yes.

MEMBER SAITO: Okay.

MEMBER WILLIAMS: I've done - I've got some of the DMV, I'm going to use it a bit in this smokers in a moment, but I haven't exploited it to identify true changes of ownership.

That's going to be a big project.

MEMBER SAITO: Yeah.

MEMBER WILLIAMS: And I haven't attempted it yet, but I think it's really important. And if we are looking so much at

what we call these first tests in that result and if it's being altered by misclassification and change-of-ownership and even out of state, we've got to look - it may be that all of this is going to come back to pretty much the same, all these things wash out, but I'm not sure. Part of me was discouraged that filling - correcting those VINs and putting them in didn't affect much of anything, why did I spend a month on that, but I'd already spent it so, I didn't know it was going to matter or not.

MEMBER SAITO: Right.

MEMBER WILLIAMS: But another part of me is saying, well, that's all right, we're not - there's still enough mysteries.

MEMBER SAITO: The other -

MEMBER WILLIAMS: The DMV records I think are going to clarify a lot of things, too.

MEMBER SAITO: The other surprising finding I saw was the 2006/2007 model years, the number of ASM tests. I mean, I find it hard to believe those can all be attributed to rental cars or -

MEMBER WILLIAMS: They seem - they're mostly dealers. I don't know what's going on there, why are you testing a 2007.

MALE: Out of state.

MEMBER WILLIAMS: Yeah, but they're not dealers, they're not out of state. There's some out of state, but a lot of them 
MEMBER NICKEY: Well, admittedly, I'm in Folsom where we have

Intel right up the street and we get a ton.

MEMBER WILLIAMS: But a change of ownership doesn't have to be done as that.

MEMBER SAITO: Yeah, I think it would. I think it would, right?

MEMBER NICKEY: Just most of the ones I've seen that are - that

are that late model, 07, 06's, 05's, they're out of state.

CHAIR KRACOV: Dennis, do you have a question?

MEMBER DECOTA: I do, I think you're right. What excellent information. I mean, it really is and I really appreciate all the work that you've done. You know, you do a great job presenting it and you help folks like me understand things better, so I appreciate that. On the retirement vehicles, did you correlate at all how many of those vehicles that are missing were retired?

MEMBER WILLIAMS: No, I haven't looked at the DMV, but that MEMBER DECOTA: That would be rather interesting in order to
build a model or to give you the missing number. I mean,
what are we really getting in reductions? What's going away
that we're not taking credit for that we should be taking
credit for with the Feds and everybody else. I mean, so to
me, that's a big number, that could be a big number.

MEMBER WILLIAMS: It could be.

MEMBER DECOTA: It could be a very positive number.

MEMBER WILLIAMS: I was trying to make an argument today we ought to look at that. I haven't done it yet.

MEMBER DECOTA: I hope I made it.

CHAIR KRACOV: Bruce?

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If I could just add onto that. It would seem MEMBER HOTCHKISS: to me that BAR would be interested in that and there may be a whole bunch of people who are missing out on vehicle retirement, whether it's from BAR or from the air management I know, I mean, if you drive down any street, districts. you can look in the backyards or up the back of some of the driveways and see some cars just sitting there. They've obviously been there for a long time. Now the problem is if they fall out of the system, then they're not eligible and we are not getting the credit for these vehicles being retired because they haven't officially been retired, so it would seem that the whole outreach program, we might be missing a whole bunch of people that could get some money from the government and we could get credit for it.

CHAIR KRACOV: Anything further from the Committee? Let's go to public comment then on this item. Mr. Trimlett?

MR. TRIMLETT: Just something to think about with relation to the vehicles that are not there. I had an '80 Mustang Turbo, mechanic's friend, in the shop more than it was on the road. What of those vehicles might be in the recall list from the Feds? Another thing, a lot of those vehicles that are not there, how about the accident reports and what are totaled by the insurance company. That might explain

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Thank you, Mr. Trimlett. Mr. Peters? CHAIR KRACOV: MR. PETERS: Yes, hello, Mr. Chairman. My name is Charlie Peters, Clean Air Performance Professionals, representing motorists. I didn't get here when the meeting started today, but I noted when I arrived there was some discussion about issues of VIN numbers or identification of vehicles and I've always thought that was a pretty important issue. As I listened to the presentation, it sounded like maybe in regards to the things being looked at, the person felt it wasn't very important, but what seemed to me - we ran across very early on the fact that there was a check digit in the VIN number which could very much assist in getting accurate VIN number into the system. Now, many of the VIN numbers are done by scanning, but my own personal experience was there's an awful lot of VIN numbers at DMV that are incorrect and I think that was even touched on. possibility of incorporating the check digit and improving the accuracy of the VIN numbers, which would have an awful lot to do with evaluation of the program and accuracy and how the public is treated and so on, could be a factor to give some real consideration to, incorporating the check digit to improve accuracy of input at the Department of Motor Vehicles or whoever is putting the data in. It seems to me as though there's been a strong resistance to

Thank you.

quite a bunch of those that are retired.

correcting problems over time. We just as soon keep the data there and have it be inaccurate, as to do anything about it, has been my perception and I've always felt that accurate data takes you to the best place much better.

Another thing that I kind of missed was there's an awful of things like U-Hauls, daily rental vehicles, etcetera, that are not getting tested at all and very possibly vehicles that are registered in zip codes that don't require enhanced inspections or biennial inspections, California vehicles, plated vehicles that are registered at addresses outside of the state and those may very well be a factor that could be significant in this process as well. Thank you, Mr. Chairman.

CHAIR KRACOV: Thank you, Mr. Peters. Ms. Lamare?

MS. LAMARE: Thank you, Mr. Chairman, Judith Lamare, Cleaner Air Partnership. As usual, very fascinating presentation by Dr. Williams. It seems to me that you might want to be looking at legislation that would impose mitigation penalties for gaps in registration. Obviously, way too premature to recommend that to you, but just to ask that question about gaps and whether there can't be a penalty to at least recoup some of the mitigation - recoup some of the emission impacts of gaps. Also, I had trouble with the presentation with the questioning over whether we were talking about change-of-ownership as an area where a car is registered, or change-

of-ownership as a task that's being performed when a vehicle changes its owner. So now I feel thoroughly confused on that and hope that Jeffrey's final report - Dr. Williams, will make clear which one of those he's talking about in each table. Finally, it seems like this report has a lot impacts on - you forgot to start the clock, somebody.

CHAIR KRACOV: Former chair prerogative.

MS. LAMARE: I need to know what the three minutes feels like.

The retirement program that the State has embarked on does focus on failures, I think. Maybe what we need to be looking at is emission volumes, estimated emissions from the vehicle rather than the failures, but clearly Dr. Williams made the point that the older cars that are left are the cream of the cream, probably, except for those that have been escaping the program. Thank you for the opportunity to comment.

MEMBER HISSERICH: Do you mind if I make a comment?

CHAIR KRACOV: Yes?

MEMBER HISSERICH: Just in response - this is John Hisserich.

Just in response to Mr. Peters' observation, I guess he must

have come in late because in fact Dr. Williams spent considerable time talking both about check digit, about a formula that he developed to correct that to tie it into the license plate and to spend probably what he suggested was maybe more time than necessary to correct the issue of

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faulty VIN numbers or misread VIN numbers, so he may have - Mr. Peters may have come in late, but in fact there was considerable attention paid to correcting and clarifying VIN numbers and possible mistakes in their recordation along the way.

CHAIR KRACOV: Thank you, Mr. Hisserich. Well, that concludes what we have down as Item No. 6.

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CHAIR KRACOV: I think the plan is to continue then with Item 7, the catchy title of Smoke Gets in Your Eyes. Maybe Jeffrey, you can briefly respond to what Jude had to say on the change of ownership issue and then what is your estimate on this presentation?

MEMBER WILLIAMS: Twenty-five minutes I believe.

CHAIR KRACOV: Twenty-five minutes, okay. And then I know the folks from ARB, Mr. Goldstene, walked in and we're very interested in the RSD stuff and also your update. Maybe what we can do - plan to do is to go through, Jeffrey, take a very quick break and then get to you guys before lunch. Does that make sense? And maybe take a later lunch today, about 1:00, but I think we all do want to get you out of here and get to that presentation. So let's go on then to Item No. 7. Thank you, Jeffrey.

MEMBER WILLIAMS: But I'll say quickly about the change-ofownership. This is the coding within the test records

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that's inferred a test that's not in the normal biennial cycle, it must have been done because there was to be a change-of-ownership or could have been a change-of-ownership and there's some tests that are in change-of-ownership areas which I would know from the code of the station. fact, in the comparison set as I'll show you here for the smokers, I've removed those because it didn't seem to me it was a natural comparison. All of this is what is the comparison set of vehicles that we should be talking about and that's a crucial issue in studying the smokers in L.A. So what I've planned to analyze here is a group vehicles that were reported on a hotline. Dean has given me the data and can describe a little better where they came from, but my understanding is there is a hotline where people can call in and say, well, I just saw 2GKN228, an '87 VW Golf, was billowing smoke and you've got to do something about that car, and we have a record of that license plate and have then looked at what is their Smog Check histories. were about more than this number of vehicles reported in the period of November through the first few days of April '07. I've sorted out the ones that - model years '76 to 2000 for which we could reasonably expect to have Smog Check histories. About another 30 were in these model years, but I didn't find the Smog Check history, perhaps because it was from a change-of-ownership district that was visiting L.A.

or something, but this is a fair number of vehicles. were a couple of buses and some diesel trucks that were reported and I didn't look at those. So to reiterate, there are 2,589 vehicles. That seems small compared to 30 million, but I want to look at them and see if these smokers have a high failure rate on their most recent Smog Check or we already know that they're bad, or this smoking another problem that we need to test separately. So the Smog Check histories can say something about the smokers, but the smokers can also say something about the Smog Check. I'm going to show some evidence there. Who knows what the truth is because it might be a clean vehicle and somebody's neighbor is nasty and is calling a smoking report just thinking the guy gets into trouble, I don't know. be that it's a terrible smoker and a lot of other things are wrong with it and lo and behold, it passes Smog Check, which says something about Smog Check. We don't know the truth here, but we can see something about whether there's a natural accordance. But we mostly want to understand something about the smokers. Are they unusual vehicles? And as soon as we ask that question, we have to say what's a natural comparison set. So I try to think about this and say an appropriate comparison set would be the same model year, the '76 to 2000, so I'm going to throw out the 2007s and so on and I'm only going to look at those that had a

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test sometime after August 2004 because they ought to - all these smokers should have been having a test at least after 2004 and they were not involved in a change-of-ownership area and haven't been tested as a fleet vehicle, there are some of them in the data, and not a dubious VIN that only had one test. And so this subset of my 30 million vehicles leads to 15,830,432, which is a lot bigger than 2,589, which is the smokers. Okay, and so I'm just going to try to compare the smokers to this set. And one thing to look at is the model years, so the black here is comparison set and the gray is the model years of the smoking vehicles within this range of model years. It doesn't overlap perfectly, indeed the smokers tend to be older, but they're very old. We're not finding a lot of 1970s and early '80 vehicles. There are some more smokers than proportional, but there are a lot more 1988s through '93 than would be suggested by just a straight model years. Here's the mileage statistics. Roger Nickey's been suggesting I look at these and here's a first pass at it. So this is the mileage recorded at the most recent Smog Check and the average over all the vehicles in these age categories. You'll notice that the smokers tend to have higher mileage on average than the typical vehicle of that model year. That sort of fits with our preconceptions, right? There's some odd patterns in this general graph, though, especially the black, which is just

the whole group. How is it that the older cars have lower average mileage? Well, some of it is that those are the ones that survived. But there's also a lot of odometers that didn't have six digits and I've tried to make some corrections for that. There are about two million vehicles here that have an obvious problem in that the mileage of one test is lower than the one before and it swings around the 100,000 or maybe 200,000. I've been able with simple means to correct about a million of those, but obviously, I've got to spend a lot more time figuring out how to correct the missing odometer readings and this isn't even a stuck This is some problems and there are 100,000 where odometer. the odometer reading is zero and there are 50,000 in here where the odometer reading is 999,999 and that can't be And I've tried to fix some of these things, but I haven't fixed them all and one of the symptoms is those average mileage in the '70s. But for our purposes here, the same problems you'd be having with the smoking vehicles and their odometers and they're reading a little higher, even in those years. So here's a picture that the typical smoker is slightly older than my comparison set and slightly higher mileage, so we would expect it to fail a little bit more on average, right? So here's main results. My comparison group versus the smokers, did it ever fail? These smokers have a pass that's including a failure, many of them have

been a gross polluter, much more than average. Double typical they've had a tamper in their history, emissions failure, they've much more often had an abort, which is another piece of evidence to me that something is going on with aborts that's not just, oops, didn't do the test right. But that - so this should make us a little nervous about It also should tell us that the smokers fit Smog Check. sort of the pattern. But here are some puzzling statistics, Some of these smokers have passed in four or more consecutive cycles. Now, smoke is different from emissions. I guess you could say that these are being picked up a different way. Now does this say that those passes shouldn't have been passes or that smoke is a different issue than emissions? I'll leave that to some other experts, but there are a number of vehicles that are the smokers that have a history of passing Smog Check repeatedly. But there are others that have failed more than There are two percent of the vehicles, of the 2,589, but that's four times the comparison set have failed four or more cycles. So these are older vehicles that repeatedly Smokers do that and I think that fits with our preconceptions about smokers. That last row, though, is another disquieting one. Now, these smokers, something's wrong with them. Maybe not about emissions, but there's something wrong with them and they have a disproportionate

rate of passing after a failure within 12 hours. That may say something about Smog Check.

CHAIR KRACOV: Roger?

4 MEMBER NICKEY: Just briefly. I'm assuming we're going on the
5 vehicles that have been reported as smokers; is that
6 correct?

MEMBER WILLIAMS: Yes.

MEMBER NICKEY: Okay, a car driving down the freeway, oil dripping out of the transmission or out of the engine, back on the exhaust, smoke rolling up, back, not coming out of the exhaust, so we don't know whether it's a tailpipe issue or not.

MEMBER WILLIAMS: We don't.

MEMBER NICKEY: Yeah.

MEMBER WILLIAMS: We don't. So here's the performance in the most recent test cycle. Again, the smokers fail more, but not hugely more. We're not getting 90 percent failure rates here, we're getting more and we're getting more gross polluters and if you control for the mileage, the implicit mileage and model year, it doesn't look that far off, right? It's a little high, but it's not abnormal, incredibly high, right? Here's another way of looking at the same data. I know the day the vehicle was reported as smoking and I know the day of the last Smog Check in the dataset, and so out of the 2,589, the Smog Check was after the reported - the

report of the smoking. That occurred in 249 of the cases,
97 percent of which were then failed and some of them failed
as a gross polluter. Another group we're going to look at a
little more closely in a moment, the time of the report
smoking and the Smog Check was very close, within a few
days. Others the last reported Smog Check was more than six
months before.

MALE: (inaudible - mic not on)

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MEMBER WILLIAMS: No. The Smog Check was before the report and there's this one group, there's only 65 vehicles, but that's out of 2,589, hadn't had a Smog Check in two and a half One of them was the one we saw in the previous talk that had a gap of five years. I don't - how are these cars escaping the Smog Check, right? But I want you to look at this column that's a percent of failures and percent of gross polluters. It's not - the percentages don't change that much, they get a little higher if we go up, which is that the Smog Check is done after the report instead of before, so we have an idea a car just sort of collapses, everything goes wrong, it's starting to go wrong, smoke is billowing out, it comes in for a Smog Check, it's more likely to fail. That seems to be consistent here, an earlier Smog Check, but it's not hugely that, right? that were true, we'd have failure rates approaching 100 percent of those that are done after. So you get some of

that. So there's a different process going on than just the car starts to collapse in every dimension and Smog Check picks it up.

CHAIR KRACOV: It's Gideon. There's a substantial portion of these that are going in for Smog Checks after the smoking report. If only 40 percent are failing, there's 60 percent that are either passing or something else is happening.

MEMBER WILLIAMS: Yeah and let's look at a few of them. In particular, let's look at seven vehicles who were reported as smoking the very day they were having a Smog Check.

Here's one. I'm going to show all seven, not to say that I'm picking these, and I'm going to show you them in the order of when they were reported as smoking. Here is a 1992 Mazda MVP, that came from out of state in 2002, seems to have changed ownership, but we haven't confirmed that with the DMV records, and was directed to test-only twice and the most recent test was the same day it was smoking and it passed, it passed four times.

MEMBER HISSERICH: This is John Hisserich. So that means that it was reported then on 11/10/06, is that -

MEMBER WILLIAMS: Yes, and here's one that -

MEMBER HISSERICH: Okay, that's the - that's the day, so.

MEMBER WILLIAMS: - was reported on 11/15/06 at the very day it was passing its Smog Check and this is a 1998 BMW and I wanted to ask Rocky this, but shouldn't this car, a 1998,

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have been Smog Checked in 2003? I don't - that's a gap. think it should have, but it's passed. Here's one that had a failure in its history and it seems to be Smog Checked in November every other year, but this year it was Smog Checked in early December, a year out, so this is classified as a change of ownership. I don't know that that's happened. It's passed that test, the day it was reported for smoking. This particular vehicle had 157,000 miles. I don't know if you noticed about that BMW, but it didn't have that many miles, 60,000 or something. Here's a 1996 Toyota that has failed before but passed on the day that it was reported as I guess you get the theme here, but let's look at this Pontiac Grand Am that's passed recently and these are all classified as change-of-ownership because - I'm not sure why, and it's passing. Now here's a 1989 Ford Econoline with 100,255 miles, this is one of the ones with the odometer's gone back over. For all I know, this is 300, 400,000 miles, I just know that the odometer looped back and so I put in 100,000 and it's been a gross polluter, it's have a failure, and this most recent day that it was reported as smoking, it had an abort and then passed. here's the final car, a Honda Civic, reported smoking in early March of this year and that day was a gross polluter and it's had a history of failure before and it has 420,000 miles and I looked at this one carefully, and the test in

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'05 showed it as 80,000 miles fewer. This car has really spent a long time on the L.A. freeways we have to think, and for all I know, it's still there, because as of yesterday, I checked the BAR website for this car and they have more recent tests than I do through mid-May, it hasn't been tested again, it hasn't passed. Maybe it's retired or maybe it's still out there. We'd like to know about this car, right? Because this one actually looks like it's really polluting where it's not as clear about some of those other cars that I looked at, right? But I'd like to know that it's actually retired and not just waiting to be repaired. A final slide concerns who owns these cars or let's say what car households they are. Remember I looked at DMV records and sorted through each zip code for the same name and address and I can get what I've called car households. Since I can do this for every zip code in the state, I chose in this instance to do it with the zip codes 90001, which is South-central L.A. through - I'm not sure there's a 90999, but those zip codes, those are definitely L.A., and I thought the proper comparison should be only cars in L.A. found 904 smokers among these zip codes. One household had two smokers. I didn't think I should look at that household in particular, that's piling on here, but I sorted the many other vehicles, there are about four million vehicles owned by these 1,431,467 households that have at least one 1976 to

2000 model year. So if you owned a 2006 Mercedes and that was your only car, you're not in my comparison set. You had to own a '76 to 2000 model year vehicle. So the smokers and everybody else here - and there are a lot more others than the smokers - and I was trying to see, is the smoker disproportionately a single vehicle owned by our quintessential poor household and so on? The first step in that is it a disproportionately a single vehicle? I could do the analysis of which zip codes, but I think I have enough smokers really to be definitive, so I thought I'd just stop here by just doing the first cut, which is does the composition of the vehicle households look different for smokers and nonsmokers and, surprisingly, it does, but not in the direction we would think. Smokers tend to come from households that have multiple vehicles disproportionately. That may fit with, well, it's the third car and who cares if it smokes, we don't use it very often, rather than, I've got to use it to get to work, which is probably what that last Honda was doing. These households that have one smoker in model years '76 to 2000 tend to own another car in that model year if they own another car. But a fair number of them own a newer vehicle, if you call 2001 and later a newer vehicle. So if we probe further into who owns smokers, I think we're going to find that it's not as demographically and economically succinct as we might have imagined.

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going to be a lot of people in L.A. who own smoking vehicles and the demographics may be representative of all of L.A. for all I know. So I think this comparison of smokers has led to a couple of conclusions. Smokers have higher than typical failure rates than the comparison set in Smog Checks, but not that far above. They have a history of failure that's more towards failure, but it's not like they always fail, always. Some of them are passing a lot of Smog Checks, that may be smoke is different than emissions, but it's a little disconcerting. Some smokers have not had recent Smog Checks, there are gaps in this. I don't know how they're registered. It's not a huge number of cars, but it's some. And some smokers are being reported as - even as they're passing a Smog Check. What that says about adding the smoke test to Smog Check, well, that will be interesting, won't it? All right, end of smokers.

CHAIR KRACOV: Thank you, Jeffrey. Really terrific work and very interesting and well-presented. I think on both of these, raised a lot of interesting questions and again makes us think a little bit about DMV and their role in all this which is something we thought about last year on the program avoidance when we looked into that. Are there any questions? Dean?

MEMBER SAITO: Jeffrey, excellent work. I think what you did is going to establish a baseline and as we go to look into next

year's data with the added component of a smoke test, it's going to be interesting to see how that changes and how effective that element is. Thank you.

MEMBER WILLIAMS: Yes.

MEMBER HISSERICH: Yeah, I'm really impressed. The one question you had about the odometer readings that were 999,999, if I remember correctly, it used to be in the Smog Check manual, if the odometer was not working or you couldn't read it, that's what they were supposed to enter and I don't know if it's still in there or not. So that may be - and I don't know how far back you were getting those readings, but I'm sure there are - there are some techs out there that still do it. And it think that's why especially the - you know, the digital dashboards, if those go out, you can't even guess. So I think that's probably why you're getting those 99s.

CHAIR KRACOV: Mr. Nickey?

MEMBER NICKEY: Did you run into any that were entered as none,

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MEMBER WILLIAMS: Not for mileage.

MEMBER NICKEY: Because I thought that's the way we entered them because we get a lot of the digital ones that don't work and we just put in none.

MEMBER WILLIAMS: It's possible. I haven't - I've just started the -

MEMBER NICKEY: Yeah. I'm almost positive that we don't put in zero and we don't put in 999. I'm almost positive we put in none, N-O-N-E.

MEMBER WILLIAMS: But you all see that if we're going to study these vehicles and predict whether they fail, we want the mileage number in there and that's a little - there are many more that are fuzzy than VIN numbers or something like that and I'm just starting to work on that aspect. I know people at BAR have algorithms for how to correct some of this, but when we start looking at the history of vehicles in the sense we can find more problems because it ought to be that the vehicles have a higher odometer reading as time goes on. Now, there are some reasons why they could be turned back and things like that, but that's not supposed to happen, but it may. I just am saying as we go further into analysis, we'll have to figure out ways to flag the vehicles where we think the odometer reading is wrong because it may affect our analysis otherwise. I don't think it particularly affected this comparison, but I can't prove that.

MEMBER NICKEY: By the way, my comment on mileage didn't have to do with high mileage. It had to do with the amount of miles the car had been driven between tests and that would say whether it had been sitting.

MEMBER WILLIAMS: Yes.

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|MEMBER NICKEY: Many cars - I get people in all the time, this

thing's been sitting for two years, we decided to see if it'll pass Smog Check, I'm going to give it to my cousin, niece, whatever.

MEMBER WILLIAMS: Yeah, and we can't tell those from the odometer's stuck.

MEMBER NICKEY: Right.

MEMBER WILLIAMS: But those are all worthwhile things to look at and it's going to affect some percentage of vehicles. I don't think it's going to affect the comparison of smokers to others. And I come back to that it's really - if we're going to say smokers don't fail that out of proportion, if compared to what, then we all ought to think very hard about whether I had the right comparison set there. I think I had a plausible one. I think if we had made any other adjustments, it's likely to show that the smokers are more like the others.

CHAIR KRACOV: Mr. Hotchkiss?

MEMBER HOTCHKISS: Yes, this is kind of I guess a question for Rocky. It seems to me at least on some OBD II cars, the mileage is recorded in the computer and it may not show up on the dashboard and I'm not sure how easily accessible that information is. Whether - the only thing that I remember is talking with a dealer after replacing a digital dash, they then had to - I think they had to send the computer or download the information from the computer to the

manufacturer to get the mileage to reenter. But do you know how accessible that is?

MR. CARLISLE: No, I don't. I think - I think that's in the works. I don't know if that's fully implemented in the parameters identification data now or not, but I do know it's in the works. But I can research that and find out.

MEMBER SAITO: That question actually came up at one of our Smog Check forums of Mike McCarthy of CARB and it's not a requirement now that OBD II records the odometer reading, but they are contemplating adding that in for the 2010 timeframe.

MEMBER NICKEY: Yeah, so again, that's - from what I heard, that's (inaudible - mic not on).

MEMBER SAITO: Exactly.

of, I looked at the mileage to see if - because I was going to show the last number and it had to be sensible. They all look like the right readings and so some of them didn't - I don't know what you define as high mileage, but it seems to me 60,000 miles on a '98 BMW isn't that high, 400,000 on a '92 Honda, that's high. And I thought that can't be right, but every two years back, it looked like a plausible number. That poor Honda worked.

CHAIR KRACOV: Let's move on to public comment. Is there any public comment? Mr. Rice?

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MR. RICE: Good morning Chairman and Committee. Just a couple of quick comments. The first one is that I think it's interesting that nobody else is asking these questions, just IMRC out of all the other committees that there are out there and other bodies there are out there, it's only IMRC that are asking these kinds of questions. congratulations to Dr. Williams. I'd like to see him continue that work. Secondarily, I'd also like to make some comments before our break to tell Ms. Lamare that I appreciate her serving both on the Committee and as the acting chair for the time that she did that, and also welcome Mr. Saito to the Committee as well. Thank you.

MR. CARLISLE: Just a notation, that was Bud Rice speaking.

I'm Charlie Peters, Clean Air Performance Professionals. Those comments about these cars that are turned in as being smoking and maybe cars smoke because somebody worked on them and something got left loose or got some transmission work and all of a sudden we've got a transmission that's bleeding vacuum back into the engine that's been hooked up and we're in doing service to this car and it's quite often that problems arise after service and that could be very well be tied into service that's going to require a Smog Check and So there's probably activity on that car more often than not when it becomes a smoker and that may very well be

a temporary situation. The guy's driving down the road after getting some service and/or it's in the middle of the service and the guy's out test-driving it and they go, oh, my God, you know, we've got to go from here. And so I would think that would be a time to be more likely when the car's being worked on than not. It's not just going to fall down. There's a lot of times when such things of smoking vehicles get generated from actually working on the car. thing is that this is not something that's generating out of Smog Check, it's appropriate to kind of tie this together and kind of give it some sort of comparison because we're going forward with this smoking test, but it's not the same kind of thing that's being observed in a Smog Check. is not something that just generated five minutes ago from the service we were doing on the car. We're not going to just turn around and fail it for smoking just because we started making it smoking five minutes ago, so this is kind of different data and so that's kind of got to be done with a little bit of caution. But I have been suggesting that we should do something about smoking cars, being able to fail them, since somewhere back about 1985, because in my shop because we've test a lot of cars, we've passed a lot of cars that smoked prolifically that passed a Smog Check just fine. So I felt that it was very poor ethics situation for the provider and there's a lot of reason to address it, but as

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we go forward with this, I - there should be some caution as to how we view this data and where this information is coming from and how. Thank you.

CHAIR KRACOV: Thank you, Mr. Peters. Yeah, that's an issue the Committee certainly will track moving forward. Len?

MR. TRIMLETT: Diesels could be smokers also. I know people who have had diesels, when going up a hill they accelerate and they throw a big smoke plume. I just wonder if there's any figures on what proportion of the vehicles identified as smokers were actually diesels. They would not have a Smog Check history.

CHAIR KRACOV: I don't know if that was addressed in the data.

Jeffrey, do you want to respond very quickly?

MEMBER WILLIAMS: Dean will have to remind me. How many data he gave me, I think it was like 5,000, something like that, and most of the ones I excluded were - half the ones I excluded were diesel and some of them were buses and others were model years, like a 1963 Studebaker. It wouldn't have a Smog Check history, so I didn't look at it.

MEMBER SAITO: I would suggest the majority of them were heavyduty diesel trucks smoking.

MEMBER WILLIAMS: Yeah, I think so.

CHAIR KRACOV: Okay. Any other public comments? Okay, seeing none, it's just after 11:30, we'll take about a five-minute break, reconvene at 11:40 with the ARB update briefly and

then the presentation on RSD. Okay, so we'll see you then. --000--

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CHAIR KRACOV: Okay, it's about 11:40. We can reconvene. I notice we still have our quorum. And so let us now proceed to first, Item 4, the ARB Update, and then following thereafter, the presentation on Remote Sensing. Mr. Goldstene?

MR. GOLDSTENE: Good morning, Mr. Chair and Members of the IMRC. James Goldstene from the Air Resources Board. Just a couple of things to provide an update for you. We're in the process of SIP season. Last week in San Diego, our Board adopted the San Diego SIP in mid-June. Next month we'll be in Fresno, and at the end of June, June 21st, we'll be in Los Angeles. And so for those of you who are interested in following SIP-related issues, including mobile source issues, please come or tune into our Board meetings. on Friday, the Governor appointed our last vacancy. She's from Fresno County, she's a supervisor, her name is Judith Case, and she'll be joining us, her first meeting will be at the Fresno meeting. Also with regard, if I may, to the prior discussion relative to Dr. Williams' presentation on smoke, I did not hear, but maybe I stepped out, a discussion about AB1870 and the impact that should have on catching any of these vehicles anyway. It's difficult to know from citizen reports if a vehicle is actually smoking or not, but

of course, now that these cars will be - smoke will be looked for at Smog Check, we should catch those. Now I'd like to introduce Allan Lyons of our - oh, go ahead, Mr. Kracov.

CHAIR KRACOV: One question. Yeah, we did mention and talked about the effect of the new Smog Check. On the SIP, what is the timeline moving out a little bit further in terms of adoption for the rest of the year and those kinds of things just so the Committee has an idea of what's ahead?

MR. GOLDSTENE: I don't have the full timeline, but the South

Coast SIP will, of course, be the most challenging and the

San Joaquin Valley SIP, also in mid-June. Those are the two

most difficult SIPs that we're working on.

MALE: (inaudible - mic not on)

MR. GOLDSTENE: I actually don't have it in front of me, but yeah, we're in that process right now and we have deadlines that we have to meet under the federal rules, yes.

MALE: (inaudible - mic not on)

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MR. GOLDSTENE: Okay. With that, I'm going to introduce Allan Lyons, who was our point person on the development and finalization of the remote sensing report. I know that many of you have had a chance to see it already, so what he's going to is provide a very brief, maybe 15 or 20-minute overview of the report and then take questions until we

break, I presume.

CHAIR KRACOV: Thank you.

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MR. LYONS: Good morning, I'm Allan Lyons with the Air Resources We recently received completed documents from our Board. contractor regarding a pilot study to study the effectiveness or the potential effectiveness of remotesensing devices to improve the California Smog Check Program. Those reports are currently available for a public comment period and they are also, at this time, being reviewed through a peer-review process. This morning, I'm going to take you through a fairly high-level overview of the key findings and sort of the bottom-line results of the study. The contractor for this project was Eastern Research Group and the contract was co-managed by both the Air Resources Board and the Bureau of Automotive Repair. study was really made up of two parts. The first part was a paper study in which we asked the contractor to go back and look at previous RSD studies and review them for any data that can be gleaned as to the effectiveness of RSD to improve Smog Check and also to see if there's any information in there that could shape the second part of this project, which was the field project. In total, about 12 previous RSD studies were examined as part of the paper With respect to the field project, over two million valid RSD measurements were collected throughout California

between 2004 and 2005. Within that dataset, there are about 420,000 unique vehicles that were identified that could be matched up with DMV records and also had a vehicle-specific power reading, or VSP within an appropriate range for the types of studying that we're going to be undertaking in this project. And about 1,000 of these vehicles were randomly selected for immediate roadside ASM tests after the RSD The purpose of the field project was to generate a reading. large RSD database that the contractor can use to answer the study objectives. Now getting into the study objectives, there were a total of seven questions that were put forth with the RFP for this contract. These questions were regarding the potential of RSD to cost-effectively improve the Smog Check Program. I'm not going to go through each question individually, but they're kind of summarized by this slide. The first four questions deal with whether or not RSD data can be used for what we call special strategies within the Smog Check Program. The first one is off-cycle call-in, where vehicles are called in between regular inspection - within the inspection cycle to see if there's any potential for increased emission reductions. question is to see if RSD data can be used to improve the high-emitter profile used to direct vehicles to highperforming stations. The third question deals with the ability of RSD to provide data that can effectively be used

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to clean-screen vehicles exempting them from their next Smog Check and the fourth is whether or not RSD data can be useful for identifying potential scrappage vehicles. the fifth question really deals with a combination of these It's whether or not remote sensing in general can be used to cost-effectively improve the Smog Check. And the contractor looked at that by looking at the ability of RSD to do all of these things in combination, which as we'll see, helps to minimize - or maximize, I quess - the benefits with respect to the costs of collecting RSD data. and seventh questions deal with determining if RSD is useful for fleet characterization purposes. And also, in general, we asked the contractor to identify how California can best implement RSD. These objectives were refined through a public workshop that was held in June of 2002. contractor went about answering these questions by constructing an I/M simulator. So this was a model that looked at the effect of these special strategies on a vehicle as it would go through. So in other words, the model looked at or made predictions about the future of this vehicle if it were to go through the normal I/M process and then it also looked at these vehicles in the future if these vehicles went through one of the special strategies we talked about before; for example, calling in or scrappage. They constructed this simulator to make these predictions

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about the performance of vehicles in future actions based on RSD data alone, the historical Smog Check data contained within the VID, and a combination of the two. basically, what this model does is it goes through and it ranks vehicles according to their predicted benefits for a particular strategy. So, for example, for calling in, it would actually rank the vehicles according to the best candidates for calling in a vehicle between inspections down to the worst vehicle in terms of benefits, so that actually would be the cleanest vehicle. And then vehicles were then selected at determined percentages to actually go through the special strategy, and then the model predicts the benefits of putting that portion of the fleet through that special strategy. One very important point to keep in mind is that these benefits are above and beyond the existing Smoo Check emission reductions. This study was done in the context that the Smog Check Program exists in California and how would these special strategies play in specifically to the Smog Check Program. And the answers to these questions, if the Smog Check Program didn't exist or if it was different than it current exists, are going to be different than the answers for - in this particular context. going to go through some of the key findings for the study. First of all, the contractor found that, practically speaking, only about 50 percent of the fleet within the five

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largest AOMDs in California could actually be seen with these RSD instruments. There are many limitations, including multiple lane freeway onramps, the availability of roads that are suitable for the implementation of RSD technology that practically limits the amount or the portion of the fleet that can observed with RSD to about 50 percent. Now after you've looked at that 50 percent, the subset that's going to have a valid in-range VSP DMV-match record, it's about 40 percent of the 50 percent, and then if you look at the portion of the fleet that's subject to Smog Check but beyond the six-year exemption, that limits it down to another 60 percent. So if you go down to the table, you see how these numbers play out. The observable portion of the fleet is 50 percent, you take 40 percent of that, which has the valid in-range VSP DMV-matched records that takes you down to about 20 percent in the fleet within the largest - five largest AQMDs and then, if you look at the portion that is also subject to Smog Check outside of six-year exemption, you're down to about 12 percent or about 2.3 million vehicles. Now for the purposes of this study, we didn't want to know just the portion of the fleet that was within the five largest AQMDs. What's important are the vehicles subject to Smog Check. So if you take those 2.3 million vehicles and divide that into the statewide fleet that is subject to I/M and beyond the six-year exemption,

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which is about 13.4 million vehicles, you see that the fleet coverage is about 17 percent. So this is a key finding. That says that really the largest practical RSD program that one can implement statewide would only be able to get you RSD records that are usable for the purposes of this study on about 17 percent of the vehicles that are subject to Smog Now, another aspect of this is at what cost is that 17 percent of the fleet covered. And data collection costs were found to be fairly high compared to fleet coverage. For a large program, the 50 percent observed fleet size, which again, gets you about 17 percent of the statewide I/M fleet in terms of coverage, costs about \$31.6 million per year just in data collection costs. The modeling and the project was designed to look at the - generally, to look at the largest possible implementation of RSD in California; however, the contractor did scale the study down to reflect medium- and small-scale implementations. And you see that if you try to target 30 percent of the fleet with RSD readings, that translates to about ten percent of the statewide I/M fleet at a cost of about \$11.5 million per year and going down to a small RSD implementation which would get you about 3.4 percent of the State I/M fleet, the costs are about \$2.6 million per year. And you'll notice that the costs reduce proportionately as the program - not necessarily proportionately, as the program gets smaller.

In other words, smaller RSD implementations are generally less expensive than larger RSD implementations for a datacollection-cost point-of-view. And the reason for that is really two-fold. First of all, when you try to get a very large RSD implementation, you end up testing the same vehicles over and over again, so you're not getting unique records, you get duplicate records. Secondly, as you try to expand the amount of RSD fleet coverage within the State, you begin to have to set up RSD sites in areas which are less productive from the standpoint of the number of vehicles that will go by the RSD unit and the percentage of vehicles that do go by that actually will give you a valid in-range VSP reading. In other words, if you go with the smaller program, you can pick the best sites that are the most productive. Therefore, your cost per record or per vehicle come down. Now, before we get to the bottom line results, I'd like to go through a few of the factors that affect using RSD for the types of special strategies that I identified earlier. And there are several factors that complicate identifying vehicles for the Smog Check improvement study. And this is a list, more or less, of what the contractor found in terms of all the factors that affect using RSD for these special strategies. And you have to keep in mind that the way this was studied, a vehicle will get an RSD measurement, and then if it appears to be a

good candidate for any of the special strategies, it at some point or another has to go through a follow-up ASM test and that ASM test will determine whether or not that vechile truly needs repairs as part of a call-in strategy, whether or not it is a good candidate for scrappage and whether or not it should be directed. Therefore, you're basically using the RSD measurement, but it has to be - what's really important is the vehicle's performance at a follow-up ASM test and therefore these are the factors that will affect you and they include the time-varying nature of vehicle emissions, RSD measurement error, variability in the vehicle's operation, the ASM measurement error, the correlation between RSD and ASM measurements, station performance, and vehicle inspection repairs. For example, if a vechile is called in, the owner may take it in for repair suspecting that there's a problem before they actually show up for the ASM test. Contractor found that these compounding factors impact the benefits of using RSD to target vehicles so that overall the benefits are low in relation to the cost of collecting the RSD data. mentioned before, questions six and seven are more about the use of RSD to characterize the fleet rather than targeting individual vehicles for special strategies. The contractor found that there are in that instance, far fewer factors affecting the results and the primary difference is that

there is not a follow-up ASM test in all of the factors that go along with that that impact the benefits. It's basically just the RSD measurement and the fact that you can take - as the second bullet indicates, a very large number of RSD readings and average them out to determine trends that resulted in the contractor finding that RSD offers a lot more potential as a fleet evaluation tool than it does as a tool for individually selecting vehicles for special Smog Check strategies. Now getting to the actual results, this is really the answer to question five and that is using RSD data for a combination of special strategies and this, as the bullet indicates, represents the most cost-effective RSD implementation that was studied because, again, you get multiple benefits for the same RSD data collection costs. In other words, if you were to look at the benefits of just using RSD to call in vehicles, you still have the same RSD data collection costs than if you used it for these four strategies. The executive summary and the report itself goes through each of these individually. If you'd like to see the individual results, but for purposes of being brief, we're going to go to the most cost-effective and talk about The results indicate that for a large scale RSD that. program, that RSD offers the potential to reduce hydrocarbon plus NOx emissions by about three tons per day for a medium program that goes down to about 2.5 tons per day and for a

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small program, 1.61 tons per day. However, the costs - the program costs in total range from about \$86 million over a two-year period down to about \$25.8 or \$25.7 million over a two-year period, resulting in a cost-effectiveness ranging from about \$21 - 22,000 per ton up to about \$40,000 per ton. And again, keep in mind that these benefits are above and beyond the existing I/M program. And program costs include program administration, the impact of the special strategies on inspection and repair costs, including the cost savings to motorists in addition to the cost for collecting the RSD data. So therefore, the bottom line is the most costeffective strategy came in at around \$22,000 per ton, which is not considered particularly cost-effective. It's not a particularly cost-effective way of going out and getting a tonnage as small as 1.61 tons per day. Now I mentioned previously that the contractor looked at using not only RSD data for these special strategies, but also the data that exists within the Smog Check database. Now one important thing to make clear right away is that we indicated before that the use of RSD data limits you to targeting about 17 percent of the statewide fleet. You don't have that limitation of you use the Smog Check database. It contains data for a very large portion of the Smog Check fleet, virtually all vehicles subject to Smoq Check have some data within the database. Therefore, you can target a much

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larger percentage of the fleet, which as we'll see, is going to cause the absolute benefits to increase. But the contractor found that using the VID data, that the VID data is actually comparably powerful to RSD for finding candidate vehicles for these special strategies.

CHAIR KRACOV: So, Mr. Lyon, so what - this has to do with using the data we already have and using it in different ways than we do right now?

MR. LYON: Correct, right. For example, if you go down to the table -

CHAIR KRACOV: Elaborate just a little bit, then. Particularly how it would apply to each of the strategies.

MR. LYON: Okay. Well, if we go down to the table and look at off-cycle call-in - and I should have explained this on the RSD, so I'll go through it a little bit. The specific implementation was studied is where you call in five percent of the best candidates for calling in based on using RSD data by itself, using the VID by itself, or using a combination of the two. So in the case of the RSD data, let me just back up here, okay. Okay. In this case, what we're talking about here is calling in - you take the 17 percent of the vehicles in statewide that you can see with RSD, you rank them in terms of best candidates, the worst candidates for calling in and then you call in the top five percent of the best candidates. That yields, for a large program, .76

tons per day. For the HEP improvement, this question is whether or not RSD data can be used to improve targeting of vehicles and sending them to high-performance stations. in this case, the specific strategy that was studied would direct 40 percent of the best candidates to high-performing Now, I should point out that this strategy, the contractor developed its own high-emitter profile for this. They did not use the one that's current being used under Smog Check. And then they added RSD data to it to see what kind of an improvement you would get. You got a .13 tonper-day improvement, 20 percent clean-screening, that's where you take rank vehicles in terms of those least likely or least beneficial in terms of taking them through their next inspection and rank those from best candidates to worst candidates and then you exempt the best 20 percent of the candidates. And these numbers were picked purely for demonstration purposes. And then finally for scrappage, the study assumed that there was \$16 million over a two-year period to buy vehicles for the purposes of scrapping them and you again would - in this case, you would actually rank vehicles based on expected emission benefits per dollar of vehicle value, but in every other aspect, the concept is similar. You rank vehicles from best candidates to worst candidates and start brining in vehicles for scrappage until you've spent \$16 million worth in vehicle purchases. That

yields about 2.79 tons for a large program. Does that help to clarify? Okay.

MALE: (inaudible - mic not on)

MR. LYONS: Sure.

CHAIR KRACOV: So the small program gets a little bit of a bang for the buck there on the \$16 million scrappage.

MR. LYONS: Correct. You're talking about scrappage in particular or just -

CHAIR KRACOV: That number's pretty high for the small program when you compare it to the others. Just an observation.

MR. LYONS: Okay.

MALE: (inaudible - mic not on)

MR. LYONS: Okay, now again, this is going through those same strategies, however, going to be using the Smog Check database by itself and in combination with RSD to answer the same questions. However, here, for example, the five percent is not five percent of the 17 percent. It's five percent of essentially 100 percent, because you can target a very large - you can target almost all of the Smog Check - vehicles subject to Smog Check through a large program. Therefore, the number of vehicles targeted is much higher even though the targeting percentage is five percent. That's a confusing point I wanted to hopefully clarify. Second, you'll see that because using the VID - that's a high-emitter profile in and of itself. It's really - the

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HEP improvement question is really not relevant or valid in That's why it says N/A for that. And again, the this case. same targeting percentages for clean screening as we saw for RSD and again for scrappage. You're limited to \$16 million worth of vechile purchases. We'll see here that the use of Smog Check data for the same purposes is far more costeffective coming in at about \$1,800 per ton, as opposed the best-case number of \$21,000 per ton that we saw before. last column looks at the incremental benefits of adding RSD data to the VID, so you have all the RSD data collection costs and then there's an incremental benefit to using the RSD data as another factor for targeting vehicles. And you see that for the three strategies here, the use of - adding RSD data to the vehicle selection process increases the emission reductions by about .44 tons per day, but it comes with a very high cost of an additional \$64 million dollars.

CHAIR KRACOV: Eldon, do you have a question? Mr. Heaston?

MEMBER HEASTON: Yeah, I just was wondering on the off-cycle

call-in, when you pick the -

MALE: (inaudible - mic not on)

MEMBER HEASTON: On the off-cycle call-in, why did you pick five percent versus - because I don't know, that area seemed like if it's right for the potential reduction, what limited you to five percent versus some higher number than that?

MR. LYONS: In this case, the contractor actually looked at the

data and found that five percent was a fairly good value that balanced cost and benefits and if you were to go to a much higher percentage of calling in, you begin to get even worse results.

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Have - other states have implemented RSD and this - have you got anything in here that compares that situation, the percentages and so on and so forth of what they're calling in, what they're doing, what they're reductions are, that type of thing, so we can look at that? MR. LYONS: They're - within the final report itself and one of the supporting reports, it does go through what other states But again, you have to keep in mind that their are doing. benefits won't necessarily reflect California's benefits because we're looking at it in the context of whatever inspection and maintenance program is in existence. not looking at a fleet of - for example, if there's a state with a very minimal Smog Check Program, using RSD data to call-in vehicles off-cycle is probably going to be more productive, because there are more emission benefits to be obtained. If you have a stringent Smog Check Program, the incremental benefit of targeting vehicles is going to be So it's not real easy to compare the results of one state to another, because the way this study was done, it's all in the context of the existing program.

CHAIR KRACOV: More questions? I know you did a literature

review and summarized each of those different - the analogs in the different states. I mean, we can talk about that a little more, but for now, if you want to just continue with the presentation.

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Okay. Finishing up on adding RSD data to the VID data for the purposes of these special strategies, there is a minimal amount of additional benefit adding RSD data, but it comes at a large cost and the resulting costeffectiveness is about \$200,000 per ton of HC plus NOx. This bullet deals with questions six and seven, which is the usefulness of RSD data for purposes of fleet characterization verifying the benefits of Smog Check, things like that. The report shows that RSD data can be a useful analysis tool and evaluation tool to differentiate groups of vehicles and to observe some of the benefits of the Smog Check Program. It was successfully used to look at differences in vehicles subject to Smog Check and not subject to Smog Check within the South Coast and to see a statistically significant difference in the emissions of those two groups of vehicles. The contractor also found that RSD can be used to correlate vehicle usage patterns with emissions. For example, vehicles that are operated mostly on surface streets were found to be generally dirtier than those that are used on freeways and another example was that RSD data was used to compare weekday and weekend

emission contributions from the fleet and, in this case, they actually found that there was a statistically significant difference in NOx emissions from the fleet on weekends versus weekdays.

CHAIR KRACOV: Did they find a lot of vehicles that they couldn't match the registration data? Did they find a lot of unregistered vehicles that - on the roadside testing?

MR. LYONS: I honestly don't know the answer to that. It's not an aspect of the data that I've looked at.

CHAIR KRACOV: Because I was looking at - it's on Table 5.1 and there was 2.2 million raw measurements, but only 1.5 million of those could be matched with registration data, 71 percent. And it goes to the same issue we keep having with registrations. Maybe it can be explained, but I wanted to raise that.

MR. LYONS: Okay. They do talk about the difficult thing, getting a clear shot of the license plate, if there's a truck with a trailer hitch, you often can't see the license plate. Those are factors that will impact that number as well as not being able to find the record in the DMV database. Okay, I'll conclude with just an overview of where we are at this point and the next steps. The documents were released for public comment. That was originally - well, we originally set it to expire on June 15<sup>th</sup>, based on the volume of paper that goes along with this

study, we've decided to extend that a couple weeks and we would be updating the website and putting out a new message on our list-serve to indicate that we'll accept comments through June 29<sup>th</sup>. There is a peer review process that's underway and when the public comment period is closed and the peer review process is finished, we hope to finalize these reports. And with that, I'll be happy to try to take any additional questions you have.

CHAIR KRACOV: Thank you, Mr. Lyons, for putting this together for us and also for - today the ARB, for extending that comment period. The documents are difficult to get through, so I'm sure we have some questions for you. We'll start with Dr. Williams.

MEMBER WILLIAMS: There was something in passing that you said about complication if people are notified then they might go and have a repair made and that makes things awkward.

MR. LYONS: I can barely hear you, I'm sorry?

MEMBER WILLIAMS: That makes it awkward for Smog Check or whatever, but this is in the peculiar math of the SIP which says that it's best if a car comes in and fails Smog Check because then it's repaired and we all get credit for that, but we should objectively want the car to be repaired sooner rather than later. If someone gets a notification from the South Coast Air Quality Management District that, my goodness, you've got five readings that say very high

emissions and the person says, well, I'm sure to fail Smog Check, goes and gets the car repaired, then passes Smog Check, yes, in the language of the math of the SIP, we're worse, but in any sensible analysis, we're better off if that car got fixed sooner and you're calling a cost where I would say it's a benefit. It's - so I just want to emphasize what you've already said. It's in the context of the current program, but also the current funny accounting of this program.

- MR. GOLDSTENE: You're right to point that out, but the purpose of this study is very narrow and it's just evaluating the cost-effectiveness of the study. It is not making a policy statement relative to the SIP.
- MR. LYONS: And I'll just say that the acknowledge of the benefits of pre-inspection repair, in my personal opinion, those are certainly benefits, however, from a study point of view, they're very hard to quantify and in this case the contractor didn't attempt to quantify the benefits of pre-inspection repairs just because you don't know for an individual vehicle what's happened reliably.

MEMBER SAITO: Thank you. And I know I've expressed this concern to ARB previously in our briefing of the executive summary, but I think it needs to be put on record that this report does not put the emission reduction benefits in SIP currency, so therefore the cost effectiveness cannot

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compared to other programs that the air districts can operate using AB923 funds for use with remote sensing and I think that to provide some background, the purpose of this report was made as a result of a 2000-calendar year SIP commitment made by the State of California where there was a shortage of emission reductions attributed to the Smog Check One of the commitments made by the State was to evaluate whether RSD can be added to the Smog Check Program to make up that shortfall and, for this report not be put in SIP currency, I think makes a total disconnect of the purpose of this pilot study and I would urge ARB and BAR that they put this report in SIP currency so that air districts can use it relative to Carl Moyer funding now made available to local districts to implement an RSD program, because without putting it in SIP currency, you're comparing apples to oranges.

CHAIR KRACOV: Dean, maybe you can explain for those of us that don't have a lot of SIP currency in our wallets, what you mean by SIP currency as opposed to the calculations that are set forth in the report.

MEMBER SAITO: Well, Mr. Lyons referred to that these emission reduction benefits are up and beyond the SIP. I would contest that if it's not in SIP currency, how do you know whether or not these emission reduction benefits are truly up and beyond what's committed in the SIP relative to the

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back and - as opposed to their model they developed - and that was another question of mine, has their model been peer-reviewed. Has ERG's model been peer-reviewed by anybody?

EMFAC model and I really think the contractor needs to go

MR. LYONS: It's currently being peer-reviewed.

CHAIR KRACOV: And do you have a response on his question about the SIP currency and explain that to the Committee?

MR. LYONS: Well, the contractor developed a new model, this I/M simulator that I mentioned before, which looks at again the vehicle going through the normal Smog Check process, compared to the vehicle going through one of the special strategies developed. And I think what I said before is that the benefits are above and beyond the existing Smog Check Program as they modeled it. So to the extent that it's a different model than models being used to generate SIP values, perhaps there is a need to try to reconcile the two. But this study has been going on for several years and wasn't done for SIP purposes per se. It was done as a standalone study to see if RSD data, when used in this context, could improve the benefits cost-effectively that Smog Check can provide.

CHAIR KRACOV: Dean, do you have any more questions on this?

Maybe I can ask a clarifying point. When we see 
MALE: Please use your mic.

1 CHAIR KRACOV: Oh, when we see the standard calculations in the SIP, the NOx and HC, does anyone know how many tons off-hand 2 3 - I know it's in the SIP certainly, how many tons a day of 4 those pollutants we get credit for or account for in our SIP 5 through the light-duty program, the Smog Check Program? 6 MEMBER SAITO: Yes, there's currently - the EMFAC 2007 model, 7 there's a switch you can turn on and off that will give you 8 the benefits of the Smog Check Program in the proposed SIP. 9 CHAIR KRACOV: But do we know how many tons per day we take 10 credit for right now? 11 MEMBER SAITO: Yes, I don't have that at the top of my head, but 12 yes. 13 CHAIR KRACOV: But we're talking about - well, you came to the 14 conclusion, it's just the R - I guess the large RSD program was about 2.5 or 3 tons, right? Do you have that in mind, 15 16 Mr. Goldstene as to what sort of the apples-to-apples would 17 be on that just so we have a sense? 18 MR. GOLDSTENE: I would have to check to make sure that this 19 accurate, but I think 400 tons per day is what we're 20 currently claiming. Does that sound about right? 21 MR. SAITO: It's a big number. I don't know if it's 400, but 22 it's -23 MEMBER NICKEY: We get 14 just off of annual testing.

MR. GOLDSTENE: Actually, Mr. Nickey, we're estimating over 20

on annual testing and 14 on low-pressure evap.

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1 | MEMBER NICKEY: Thank you.

MR. GOLDSTENE: You're welcome.

CHAIR KRACOV: When you say annual, you mean the AB616?

MR. GOLDSTENE: Right.

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up on your questions?

MEMBER SAITO: One other comment I would make is that a lot of the model that ERG developed, I think you talked about - there's a lot of focus on directed vehicles and right now my understanding is that if you look at the most recent data, there's not much difference between a test-only and a test-and-repair relative to the effectiveness of the program so I really question the origin in terms of some of the assumptions made in ERG's model, whether it's really up to date today. And my last comment is, as you are aware, the South Coast submitted a proposed pilot study using RSD to the Air Resources Board. Our most cost-effective strategy was not scrappage, it was actually repair and I'm wondering why the ERG report didn't look at repairs and only looked at scrappage.

MR. LYONS: Well, I think the primary reason is because we put out - we work-shopped and put out the seven study questions and they did their best to respond to those study questions.

MALE: Five years ago.

MR. LYONS: Yeah, and that was several years ago and a lot has

transpired since then, to where if we did it today, maybe things would be done a little bit differently in terms of the context of the study set-up.

CHAIR KRACOV: Mr. DeCota? Oh, sorry. Mr. Goldstene, did you have a point to add?

MR. GOLDSTENE: I'd just like to add and maybe BAR can add some clarification to this, but they're showing an opposite relationship to repair and scrap that Mr. Saito is referring to, that their scrap program is much more cost-effective than their repair program, so it would be interesting to compare that data, not necessarily in this context.

MEMBER SAITO: Yeah, I would just say that if you look at our proposed pilot program, we're paying \$500 for repair, while the scrap - to scrap a vehicle is anywhere between \$1,000 and \$2,000, so just on those sheer numbers, it would make the repair program much more cost-effective.

MR. LYONS: I guess just to point out that there is a repair aspect to the study because, for example, with the five percent of vehicles that are called in, those that fail that follow with the ASM test, the benefits assume that those vehicles are brought into a passing state. So there are -

consumer?

MR. LYONS: Repair costs are included in program costs, so - MEMBER SAITO: So does that go into the cost-effectiveness

1 | analysis?

MR. LYONS: Correct.

MEMBER SAITO: And was it \$500 or do you know what the -

MR. LYONS: The average repair cost?

MEMBER NICKEY: The average repair cost the last time I looked was under \$300, that's overall.

MR. LYONS: I'd have to look to see the actually number they use.

| MEMBER NICKEY: It's in the executive summary, I think.

MR. LYONS: Okay. I don't think it's actually in the executive summary, but it's in the body of the report. I would have to go back and find it.

MEMBER NICKEY: I meant the executive summary that the BAR puts out monthly.

MR. LYONS: Oh, sorry.

CHAIR KRACOV: Roger reads that religiously. Dean, anything further? Mr. DeCota, did you have anything?

MEMBER DECOTA: Yes, Mr. Lyons. I really have trouble with the age of the modeling that took place and how it was put together. Why wasn't real comparisons done instead of modeling? I mean, there's a ton of information out there on RSD in State programs that is current that we could actually use as hard numbers. Why are we using a sophisticated modeling to take and accomplish something that we could get those actual percentages and other areas that uses RSD as

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one of them. To me, it's the most commonsense there is, to taking in and really polishing our emission reduction It puts an independent source out there to detect cars that are polluting and it brings them back into the program. They could be used at border crossings to detect vehicles from out of state, we could pass legislation that you would be ticketed if your pollutes coming into the There's so much that could be done in using both of these technologies to create a very, very effective emission reduction program. Why aren't - I don't understand why we've gone to all this time and we have - this is something in my opinion is much, other than maybe Gold Shield and its pilots, because more pilots run on it than any program that we've looked at with Smoq Check. I'm worried that there's something political here. I don't like it.

MR. LYONS: The report does talk about other ways in which the data was analyzed. For example, it presents the results of the immediate roadside ASMs following the RSD reading for the 1,000 vehicles that were randomly chosen. However, I think to answer your question overall, the reason the simulator was developed was because the contractor thought that was the best way to look at the incremental benefits of the RSD with respect to Smog Check. If you're looking at RSD benefits in more of raw fashion outside of any Smog Check Program, there are different ways to do that, but they

were specifically trying to look at the above-and-beyond benefit to the current program and they felt that a model that would help them answer that question is what was needed. They did some type sub-study and it doesn't necessarily translate into that kind of an answer.

CHAIR KRACOV: Dr. Williams?

MEMBER WILLIAMS: I've been puzzled about the cost-effectiveness argument because it's so much the implementation costs of one of these and I'd just like it articulated what are the assumptions about the cost of finding the license plates and so on. And I think a large component is the cost of actually recognizing the plate as what I've read about - from this report, and so it envisions a human looking at the plate and saying what it is and then a human looking in the DMV records somehow, if I understand this correctly.

LYONS: There is plate-recognition software out there, but I believe for the purposes of this actual study, we ended up using people that actually read the license plate off the picture. However, the costs which are indicated in the report range from about .50 cents per record for the smaller implementations up to about \$1.00 per record for the large implementations for the reasons I talked about. And I don't believe that plate recognition is a big part of that cost and I think those are generally -

MEMBER WILLIAMS: But this is what has puzzled me in looking at

these numbers, especially as a function of the size of the Once you have one of these remote sensing devices installed on a freeway ramp or something, it doesn't care how many readings it takes and the software that's doing the plate recognition doesn't care how many, so it should be that bigger is more cost-effective in that sense because these are set-up costs and so on and I think there's some implicit assumption here that there is a lot of human costs that is per plate or something.

MR. LYONS: These are manned - I'm sorry.

MEMBER WILLIAMS: And they be reasonable to do that, but that's where the crucial costs are and it's not really about RSD, it's about that there has to be a human next to the machine when it's set up, if that's the assumption because otherwise, it's got to be just an inflated - I can't imagine that the costs aren't lower at a bigger program because it's almost all set-up costs. So there's something disquieting in those computations. I don't say they're wrong, I just am confused by them.

MR. LYONS: Okay, they did assumed manned RSD and it's not necessarily for license plate recognition, but that there would be somebody at the RSD site when it was running. So to that extent, there is certainly a manpower cost that goes into the RSD data collection costs.

CHAIR KRACOV: Just on that same point, and then we can go to

whoever else has questions on the panel here. When you say call-ins, do you mean somebody on the phone or they get notices? Because I do notice here I think it says the large program you would have 20 persons that are your public information and communication. Are those people just running the program and getting all the numbers and the notices out or are they actually on the phone? What are those people doing?

MR. LYONS: They're getting the notices out. It assumes that the people are notified by mail.

CHAIR KRACOV: Mail, okay.

MR. LYONS: Another part of the manpower for the central office is going through that RSD data and coming up with a list of candidate vehicles.

CHAIR KRACOV: I see. Are there any other questions or comments from the Committee at this time? Okay, then we'll go onto public comment. We'll start with Mr. Peters.

MR. PETERS: Mr. Chairman, Charlie Peters, Clean Air Performance

Professionals. Mr. Chairman, I'd like to make a point of

order. This meeting in the past has been ran through the

Chair and just deciding on everybody piling on, I don't know

that that's appropriate policy and I'd like to question that

and find out what your response is, Mr. Chairman?

CHAIR KRACOV: Well, I'll ask the other Committee Members. No,

I'm just kidding. I agree, things should be run through the

Chair. I think it's been relatively orderly so far, but always appreciate your constructive criticism, Mr. Peters.

Mr. Rice?

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MR. RICE: Good afternoon. Bud Rice, Quality Tune-Up Shops. Well, it's an interesting day. We've waited quite a while for the report and I'm still kind of muscling my way through it as well. A couple of quick things. One is I - just as a simple shop guy sitting here listening, it appears to me as though in the end, you're not going to get guite the bang out of RSD that I think a lot of people thought you would. Also, where on the SIP side did we already have credits already allocated towards a program that did work? in the end this doesn't work, now all of a sudden Smog Check is back in a negative position again and all of a sudden we're going, well, we didn't make it again. Well, we didn't make it because some of the assumptions were wrong. Not because Mr. Nickey's shop didn't do well or my shops didn't do well. It's because some other assumptions loaded on the fact that we were supposed to get more credit than we're ever going to get perhaps out of RSD. So I have some concerns about that. Also the point about call-ins. МУ understanding, just from listening, was that you call somebody in and they could come over and have their car checked again at an RSD place. Well, why not use the VID data and call those guys in and just have them go back and

have a regular Smog Check done again and cut out all those costs. If the guy's car is high as an emitter, let's figure that out and then let's fix it. Because most of the benefit comes from fixing stuff, then let's fix it. And then the last point was in terms of Mr. DeCota, you made a comment of you thought this was an effective way to add some benefits to Smog Check, but if it doesn't work, it doesn't work, regardless if it was a good idea or not. If it doesn't work, it doesn't work. So thank you very much.

MEMBER DECOTA: I have a response.

CHAIR KRACOV: Dennis, do you want to respond quickly?

MEMBER DECOTA: Yeah, Bud, I'd like to respond to you on that one issue, is that all I'm saying is we don't know it doesn't work. From what we've learned here today, we don't know that yet.

MS. LAMARE: Good afternoon, Judith Lamare, Cleaner Air

Partnership. It's a big study and we haven't really had
enough opportunity to dig into all the details. I don't
know anyone yet who's studied it to their satisfaction, so
obviously we'd like more time and more time to comment to
IMRC about what we find in this report. It's really
interesting to read. My concern is that vehicle model years
'01 through '06 were automatically excluded from the program
to be evaluated and that troubles me. I don't know what
impact that has on the cost-effectiveness. How would it

differ if model years '01 through '06 were included, and given the fact that just three years ago model years '04 and '05 were added to the exemptions and that we knew at that time that there were four or five tons there, it's suggested to me that there are some gross polluters out there in the The ones that fail, fail big and should be newer cars. identified and called in. But at least we should know what the impact on cost-effectiveness would be and we don't have that in this study. Perhaps the ARB and ESP could make a back-of-envelope assessment on that. I'm also concerned about the fact that RSD identifies vehicles on the road that maybe aren't in the database that have previously been registered. The gaps that Jeffrey was talking about earlier today and those vehicles are not in the VID. They're not identifiable in the VID, so I'm confused about why the very benefit of RSD, which is eyes on the road today, isn't being looked at as an add-on benefit here in the sense of capturing vehicles that would fall out of any VID analysis. I wonder also about cost-effectiveness. Given the new SIP and the fact that we are looking at harder and harder tons to get, more and more costs to getting fewer and fewer tons, how do we know what a cost-effective number is today. know what yesterday's cost-effective number is. what was established for the Moyer Program given what has been achieved by the Moyer Program, but we're moving into a

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realm where costs for reducing tons of hydrocarbon and NOx are undoubtedly going up and so how do we compare costeffectiveness to a moving target that we've never before even discussed in this Committee as to what is going to be the cost per ton to reduce mobile source emissions over the next five, ten years. So thank you for this opportunity to I think there's a lot more to discuss in this comment. study and I thank the State for taking it and doing it. MR. NORD: Carl Nord, vice president of marketing with ESP, the supplier of RSD equipment. Clearly, we're not pleased at all with the report and, Mr. DeCota, we agree with you. There are a number of states out there and a number countries that are effectively using RSD, but that was discounted, so I think there are some avenues we can go down there. And as some future time, either ESP or, if you don't want a vendor in here, we can get another party. We'd like to do a presentation on how RSD can be used costeffectively. We believe it can be done. I'm not going to go through an 800-page report that we've got serious problems with. There's not time and I've only got three minutes. But I'd like to know one thing and that is who is the peer group going to be that's doing the review, so we'd

like to have that information. We'd like to get access to

question as to where did this data come from, how was this

some contact in ERG. Every page for us brings forth another

1 put in. For example, you have an HEP program right now, but 2 ERG substitutes its own magic black box that's going to do 3 something better, worse? I'm not really sure. I'm sure 4 that it proves out to be better and then you cripple RSD by 5 saying, well, we're only going to give you benefit for the 6 increment over this untested super-duper black box. 7 I'll use that as one example. The second example, we go 8 through the costs that are used in here. They bear no relevancy to what we do in other states as a profit 10 organization. If this is the type of productivity, 11 efficiency, and costs that are going to be incurred by ERG 12 running an RSD program, then we might as well go out of 13 business. But we've done about 25 million records, we've 14 been doing it for about ten years profitably, and nowhere near the costs. And I don't mean the administrative costs, 15 16 I don't mean this 20-person call center that's going to 17 built out there. I mean the operational efficiencies on the 18 side of the ramp. I mean, we're very disserved by the 19 I'll cut it off at that point. We will be making

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CHAIR KRACOV: Thank you. Mr. Trimlett?

MR. TRIMLETT: Len Trimlett, Smog RFG. Two questions; one, how would the cost-effectiveness change if in fact the license plate reader had been able to read those two million records automatically, rather than having to manually inspect each

comments and we're sorry that it was done this way.

and every record and then say, oh, that's what it is, put into the database? It seems to me that and the software update that was necessary five months into the operation that caused a start-over added significantly to the cost. I don't see anything in the report about that. The other effect - there's nothing in the report that talks about the effect of vehicle mix on site location and the restriction on site location. In particular, if I have a site with a lot of motorcycles or a lot of trucks, semis, that's going to result in a lot of vechile records that I can't use. What was the effect of vehicle mix on site location and what is the effect on cost of that software update that had to made and the manual reading of the two million records. I'd like to know the answer to those questions.

CHAIR KRACOV: Thank you, Mr. Trimlett. Mr. McClintock?

MR. MCCLINTOCK: Good morning, I just wanted to comment very briefly on a few items, areas, that I think you should look into. It really comes down to coverage costs and benefits. On the coverage, we've been told that RSD can only cover 17 percent of the fleet. In Missouri, it's covering 50 percent of the vehicles which are subject to I/M with five vans. There is no reason why the same couldn't be achieved in California. And as I look through the report at this VSP power coverage, I just want to comment that I think, as we heard this morning, the assumption is that only 40 percent

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of measurements would be within the VSP range, but in fact and that's in Tables 1.1 and 6.5, that found that 40 percent of the records were within the VSP range. In Appendix B, it's described at 44 percent. When I looked in Table 6.2, it looks like it's 58 percent were actually experienced in the program because it says all records 2.2 million, valid RSD measurements 1.4, plus moderate engine load, 843,000. So just that calculation of 58 percent - as a matter of experience, in Missouri, we're getting 80 percent of the measurement, so within this power range without a real attempt because Missouri doesn't require it. And added to that is that most vehicles have multiple measurements, so when you factor that in as well, actually 90 percent of vehicles have a measurement within this power range. So the 40 percent is, it's just not credible. On the cost front, if you go through the report, it suggests that the pervehicle, per-unique-vehicle measurement, it's going to range from \$6 to about \$14 per measurement, depending on the size ESP, I happen to know, is getting \$1.08 for of the program. each unique vehicle they identify in Virginia within the reasonable power range. So there's just a disconnect on the And the third issue, which I think is probably the most important is that the way the benefits have been evaluated and Dr. Williams touched on it earlier, the advantage of RSD is it's on the road and you're measuring

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doesn't matter which test you did, whether it was RSD, ASM or even FTP, it wouldn't help predict which vehicles would fail when they came into the program. So (timer sounding) but the important thing is, they have high emissions on-If they get reduced, as Dr. Williams said before they come in the program, that's a benefit and it needs to be This is such a narrow view, it's not credible. counted. CHAIR KRACOV: Thank you, Mr. McClintock. Mr. Peters? MR. PETERS: Yes, Mr. Chairman, I'm Charlie Peters, Clean Air Performance Professionals, here representing motorists. Chairman and Committee, I think there may be an additional factor here that should be considered in this process and that is technology that is much more effective than the one

failed ASM at roadside.

later.

high-emitters and previous call-ins in a roadside study have

shown that if you find a high-emitter on the road and you

on the road and then call it in and it comes into the I/M

test it on the road, it's the high-emitter. If you test it

Program, yes, maybe 30, 40 percent of them fail. But guess

what? In this study, if you look in the table, 92 vehicles

How many failed; 39 out of 92, 42 percent.

the same percentage on the ASM basis as failed on the RSD

basis and there's actually a quote in the report, if I can

find it, I don't know whether I can, which suggested it

the - not called in, but they came into the I/M Program

They were called in or came into

being discussed. That technology is the stuff that's between the ears of the people who provide the service and appropriately empowered and supported. The program could do much better than it does. In the first place, in my humble opinion, the program is much more effective than it is currently being given credit for in that there's an awful lot of cars that are prevented from becoming dirty because the program affects behavior in the marketplace and provides a much better fleet reduction and emissions than anybody's given any consideration for. In my humble opinion, that number should be at least 1,000 tons per day additional reductions to what we are currently giving as a credit to the program, if we find out if what's broken is actually getting fixed and stop this process of primarily using complaints as a basis for enforcement in the marketplace and add to what we're doing, finding out if what's broken actually gets fixed, to provide better support for the providing person to be able to appropriately act within the I believe that total emissions reductions with in the fleet - not how much reduction you get on a particular car that's tested and retested, but the reduction in the fleet will expand to an additional 1,000 tons per day in emissions reductions. So what's being discussed here is not taking into account what I believe we're currently doing or what we can potentially do with a competitive marketplace

system that gets appropriate support, so I think that should be a part of this discussion. Thank you, Mr. Chairman.

CHAIR KRACOV: Thank you, Mr. Peters. Just a follow-ups based on the public comment, if that's okay, Mr. Lyons. Can you talk to us a little bit about the peer-review process that you're going through in the next four to six weeks?

LYONS: The peer-review process, which was done through a Cal/EPA-wide contract, selected three people, academic professionals, to review the reports, those that have been released to the public. They are currently in the process of reviewing them. At this point, we are not planning to release who they are, at least prior to their completion of their work, but I can say that there are three people selected without any input from ARB, they were selected by Cal/EPA staff through a contract process which purposely keeps people who are close to the report away from their selection and they're currently going about the process of reviewing the reports.

CHAIR KRACOV: Thank you. I just have a couple of other little quick follow-ups. You know, they have the review of the literature on remote sensing, which talks about the ten or 12 other programs and there's a lot for us to review. Which of those other programs do you find particularly instructive? Is it Missouri, is it Virginia? Are there ones that we should direct particular attention to in terms

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of being good analogs to what a California program could look like? I understand that they're different and each state has its own I/M quirks and differences, but are there particular analogies that are very useful for this Committee and others to study, in your view?

MR. LYONS: Well, in my view, I guess I personally don't have an opinion on that, I'd have to let the reports speak for itself.

MR. LYONS: I don't recall the report ever indicating which of the 12 studies was the best. I think they form general opinions based on a review of all the studies. I haven't personally reviewed each of those studies, so I unfortunately don't have an opinion of my own to tell you which is the best.

CHAIR KRACOV: Does the report answer that question, then?

CHAIR KRACOV: And then the last follow-up question that I had is you talked - you compared using the VID information that we have to the cost and benefits of the RSD in combination What kinds of things were you thinking and then RSD alone. about or was their consultant thinking about in terms of mining the VID for new information? Can you give us some examples?

MR. LYONS: Well, the models that use just the VID in the modeling report, which is the largest report out there, goes through that in detail, talks about the fact that they look

at a subset of vehicles that had Smog Check data within the database both before and after the RSD reading and their models are based, I think, if there's anything new about it, I think it's the way in which they use the existing ASM Smog Check results to develop predictive strategies about how that vehicle is going to do in the future.

CHAIR KRACOV: And that information is found in one of the appendices to the report?

MR. LYONS: It's in the modeling report, again, which is the thickets and, I guess unfortunately, most technical of the reports, but it's explained in detail in that modeling report, yes.

CHAIR KRACOV: And they found those strategies very costeffective, correct?

MR. LYONS: Well, yeah, the combination of strategies is what comes in around \$1,800 per ton, HC plus NOx reduced.

CHAIR KRACOV: Thank you. Mr. Saito?

MEMBER SAITO: Yes, just a couple of follow-up questions. I guess in terms of the peer-review panel, do they all have background in I/M or are they totally purely academic?

MR. LYONS: They have background in the subject area, yes.

MEMBER SAITO: Okay. Well, I was going to offer, is there would BAR or ARB consider allowing comments from IMRC to go
- to be submitted to the peer review committee?

MR. LYONS: That is actually our plan. The public comment

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period, we set the deadline short, I guess a little too short the first time. But we set that deadline with the idea in mind that we would provide all the comments received to the peer reviewers for them to review to the extent that they found that that was appropriate. And with the way, even with the extending of the deadline, the comments received will be available to the peer reviewers before their comments are due back to the ARB and BAR.

MEMBER SAITO: My final question is in the contract with ERG, did it actually specify the development of this I/M model for California?

MR. LYONS: I would have to go back and look at the contract language. My best recollection is, no, it doesn't.

MEMBER SAITO: Thank you.

CHAIR KRACOV: Refresh our recollection; when is the last day for comments to be submitted?

MR. LYONS: June 29<sup>th</sup> at this point. The website will be updated. We'll put in a new message on our email list-serve to that effect.

CHAIR KRACOV: So Mr. DeCota, I think, has a final comment from the Committee and then I'd like to discuss amongst us how, as a Committee, any specific comments and what our timeline will be.

MEMBER DECOTA: Actually, that's what my line of questioning is. Between now and June  $29^{\rm th}$ , we may have an IMRC meeting, but

we won't have time to use any data that we were able to get in addition to this to help us make a decision, so I guess, in all fairness, maybe we should ask that if someone like ESP has information they want to submit to the Committee for us to look at and to compare states and get that information that we need to get that as soon as possible.

CHAIR KRACOV: Rocky, do you have any proposals or thoughts on what the next step should be for this Committee with regard to the RSD report?

MR. CARLISLE: Yes, one of the things I did, I dedicated Steve Gould's time, in fact, he started last week, and he's made significant progress. He's already sent me like five pages of comments on the report and I know he was working on it over the weekend. So my suggestion was that once he finalizes those comments, that I submit them to all the Committee Members and then they can basically submit comments to me, you and I and Steve Gould, or if you want to appoint another Member of the Committee as a subcommittee, we can formalize those for discussion at the next meeting and that way we can adopt, you know, formally adopt comments to BAR and ARB on this issue.

CHAIR KRACOV: I would - what do other folks think about that?

Are there any other comments from the Committee on -

24 | MALE: (inaudible - mic not on)

CHAIR KRACOV: Yeah, that sounds pretty sensible to me. Is that

that, Rocky?

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MR. CARLISLE:

meetings.

not to everybody else, having made that mistake once before.

That's correct. We don't want to have any serial

CHAIR KRACOV: Okay, so that will be the plan then. Whoever in the public has comments on this, you can be the

clearinghouse for that information, can draft up some things that will then be circulated to the Committee, comments will go back to you, I can work with you and Steve on that and we'll have some sort of draft present at, I guess, our June 26<sup>th</sup> meeting and then we can discuss at that time what

the kind of thing we would need a motion to entertain on

just - like I say, you can assign somebody else to do that

if you want to on a Committee, or it can be the three of us.

wants to speak up, but that sounds like a reasonable way to

those comments out, that we've got to respond to Rocky and

MR. CARLISLE: No, you don't have to have a motion. You can

CHAIR KRACOV: I'd be happy to do it unless there's anyone that

MEMBER HISSERICH: I was going to remind us that when they send

Mr. Hisserich, did you have -

action to take. We'll take one last comment and we'll try

to end right at 1:00 like we wanted to.

MALE: I just quickly have an open question on who at ERG we can go to with questions about how the data was developed.

CHAIR KRACOV: I would go speak to the ARB offline on that, if

you'd like to.

2 | MALE: Okay.

CHAIR KRACOV: Mr. Peters?

MALE: Well, let me ask it a different way. Will we be allowed

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MALE: (inaudible - mic not on)

MALE: But we have some pre-comment questions.

CHAIR KRACOV: I ask that you take that offline if you don't

mind. Mr. Peters?

MR. PETERS: Thank you very much for the additional input on behalf of the motorists of California. I'm Charlie Peters, Mr. Chairman, Clean Air Performance Professionals here to represent motorists, a coalition of motorists. I have in this little book in my hand something that I find interesting. This is a note from Dr. Steadman concerning a report that he wrote over a decade ago and in that report is a list, quite an extensive list, of supporters and funders for this process and since then I have seen a continuation of that funding and support and process, pilot studies and actually in-service processes. So I think this technology, since it was required by urgent legislation in '94 to be implemented immediately and the State of California apparently has reservations with it all along, if we had spent this kind of money on 1/100<sup>th</sup> percent of this amount of money finding out if we can provide better support so

that the public would get a better quality, better ethics, better outcome of this program, I think maybe we could make something that might be 100, 1,000 time as effective without even continuing this discussion. Thank you, Mr. Chairman.

CHAIR KRACOV: Thank you very much, Mr. Peters. Okay, with that, we're going to take our lunch break. It's about 1:00, five after 1:00. Do folks want to go until 2:00, do we want to go until 1:45? Okay, we'll reconvene at 1:45. Thank you.

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CHAIR KRACOV: Please come to order, the afternoon session of the Tuesday, May 29<sup>th</sup>, 2007 meeting of the California

Inspection and Maintenance Review Committee. I note that we still have a quorum for this afternoon's session. Rocky, it looks like we've taken care of agenda Items 1 through 9, and we took care of the lunch break, right?

MALE: (inaudible - mic not on)

CHAIR KRACOV: Oh, yeah, excuse me, that's right. Why don't we then proceed then to Item No. 8. Do you have a presentation on that Rocky? I know we've got something in our packets.

MR. CARLISLE: No, these were simply questions generated by the former Chair that resulted from a technology forum at the South Coast Air Quality Management District back in March, or was it April?

CHAIR KRACOV: And it's Tab 5 in our booklets here?

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MR. CARLISLE: March 21<sup>st</sup>, yeah, under Tab 5. And Jude had provided these a while back and I thought they were worth certainly of discussion for this Committee because there's a lot of important issues in these questions and I wasn't sure where the Committee would want to go with them.

CHAIR KRACOV: Okay, why don't you just give us a few seconds to review them and then we can discuss.

Mr. Saito was the host of that meeting, by the MR. CARLISLE: way, and so he's got a lot of insight as to these questions as well.

CHAIR KRACOV: Dean, do you have anything on this?

MEMBER SAITO: Yeah, I've got one thing I can report on. the last couple of weeks, I, along with the Air Resources Board, met with a company called Network Car Systems and they have indicated an interest to participate in our pilot program where they're going to cost share, for those consumers who agree to get their car repaired in our program, to cost share the testing of an OBD III program with a transponder and to monitor those cars' emissions on a continuous basis. So we are trying to work out the details of maybe incorporating an element in our pilot program where consumers who voluntarily get their car repaired could option for this transponder unit that will continuously monitor their car's emission and send us and the consumer a signal when there's a MIL code failure. And so it's a way

we can monitor the durability of the repair over time and it's sort of an added element to our pilot program.

MEMBER NICKEY: Are you going to monitor emissions or OBD II status?

MEMBER SAITO: It's really OBD II status.

MEMBER NICKEY: Big difference. Okay, that's what I thought.

MEMBER SAITO: Yeah.

CHAIR KRACOV: It seems to me, Rocky, that a lot of these questions kind of can be grouped together. A lot of them have to be with OBD and OBD II and III, I guess, and then another part of it seems to focus a lot on scrappage and then a third thing that I just observed. There's on these incentives and I know that you were trying to appoint some sort of subcommittee to look at the issue of incentives and maybe some of these questions can kind of be divvied up and put in the pile for these different subcommittees of our Committee.

MR. CARLISLE: Yes, I would agree. I did have a question, Mr. Chair, for Mr. Saito with regard to the pilot study. Is that going to be an extension or in addition to the study that the Bureau did from 2000 to 2005? I don't know if anybody's familiar with it because they used Network Car in a study where cab companies and some private individuals were actually exempted from the Smog Check requirement if they had that device plugged in and the agreement was that

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they had - I don't remember if it was 30 or 45 days in which to fix their vehicle if their MIL was illuminated because BAR would be notified of that fact. Is that going to be an extension of that study?

MEMBER SAITO: Our pilot study is totally separate from the study that BAR and ARB conducted relative to remote sensing. It's going to be - it's strictly a voluntary program for consumers where we're offering up to \$500 in repair or up to \$1,000 - \$2,000 to scrap their vehicle. But this added component was a way we felt we can attempt to measure the durability of the repairs over time.

MR. CARLISLE: Is that program going to seek an exemption from the Smog Check? I'm just curious.

MEMBER SAITO: At this point in time, we have not sought that.

15 | MR. CARLISLE: Okay.

CHAIR KRACOV: Was there anymore - Mr. Hisserich?

MEMBER HISSERICH: I will reveal my - this is John Hisserich.

What is TSI?

19 | MEMBER DECOTA: Throttle body injection.

MR. CARLISLE: No, two-speed idle.

MEMBER SAITO: Two-speed idle.

MEMBER DECOTA: Two-speed idle. I used to be a mechanic at one

time. It's true.

24 MR. CARLISLE: It's confusing.

CHAIR KRACOV: I hope there's something else called throttle

body inspection.

MEMBER DECOTA: Throttle body injection.

CHAIR KRACOV: Injection.

MEMBER DECOTA: Yes. No, I think that maybe staff should lump these together and then the Chair or the future Chair should assign them out and we try to get - you know, there's some things here we could go to, academia, as far as the different tests and what are the schools finding out and - like an Escalambre-type guy or something like that and get some opinions back on.

CHAIR KRACOV: Anything further from the Committee on this? I
want to thank you, Ms. Lamare, for putting these questions
to Rocky and, please, if you have a couple of comments?

MS. LAMARE: Judith Lamare, Cleaner Air Partnership. I think
the Chair did a great job of clumping and asking staff to
categorize these questions and, clearly at the South Coast
Forum, a lot of issues came on OBD monitoring, a lot of
different kinds of issues that bear further investigation.
But I bring your attention to number 13 because at the South
Coast Forum, Chief Mehl mentioned that she wanted to do a
Smog Check summit. I don't know that we will - we should, I
think, want to encourage the Bureau to do that or the Bureau
and ARB and IMRC to jointly sponsor a Smog Check summit that
will bring a lot of folks that are really concerned and
interested in the future of improvements to Smog Check and

performance issues into a broader forum where more people can participate and have a real conference about some of these issues. Thank you.

CHAIR KRACOV: Anything further comments on topics related to the South Coast Technology Forum? Yes, Len?

MR. TRIMLETT: Len Trimlett, Smog RFG. Dean what were the requirements for the vehicles that would be eligible for the OBD III?

MEMBER SAITO: Basically that they have to be '96 or newer, be equipped with OBD II and they have to be identified as a high emitter as part of our RSD program.

MR. TRIMLETT: Okay, so 1996 and newer.

MEMBER SAITO: Yes.

MR. TRIMLETT: Thank you.

CHAIR KRACOV: Thank you, Mr. Trimlett. Anything further from the public on this agenda item? Seeing none, we'll close the discussion on this agenda item.

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CHAIR KRACOV: And we'll proceed to Item No. 10, our Report

Planning Update and Discussion. Rocky, I'll let you lead
this discussion.

MR. CARLISLE: Thank you, Mr. Chair. What I've attempted to do
is just highlight here what the issues are in the topics and
each of the chairs have some information. For example, Mr.
Heaston handed out a recap, if you will, of the SIP issues

and I think everybody on the Committee got a copy of that. With regard to Smog Check station performance, if you notice since Ms. Lamare is no longer sitting on the Committee, I have replaced the chair with Mr. Saito and that is certainly your discretion if you want to change that or leave that. With regard to Future Directions, Item 3, Program Avoidance, Item 4, and Comparison of Other State Smog Check Programs, with the exception of Item 5, I'm going to come back to 3 and 4, but the reason I want to mention Item 5 is because about two and a half weeks ago, I did send out 37 notices to other states. It was the questionnaire that the Committee had approved at the previous meeting and while we're not going to look at all the states, I just - I make - I just decided since it was no more work really to send out ten versus 37 because it's all mail merge, it's an automated process, I just sent out everybody a copy. And so far to date, we've had about 12 responses and after I get each response, I also send - I send a follow-up letter so that they know we appreciate their time, because it does take them some time to look up that data, and I'm still waiting for the others to come in. This next week, Mr. Gould will probably follow-up with phone calls for those that haven't responded because there's a couple of states, key states, for example, New York, they haven't responded yet. has, though, so that was a good thing, and we'll follow up

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any formal meetings other than with the subcommittee on Incentives and we did have a meeting a week ago, last Tuesday, and we had good attendance there. There were about seven people in attendance, including two of the three Committee members. One Committee Member had to be in Washington, I understand, to testify before the Senate and so he couldn't make it for obvious reasons, but the other two Committee Members were there and we had a good discussion. It was really organizational to see what it was the Committee was going to do because we like to prepare and have something for the IMRC by August so we could include it into the report. And so we're going to have monthly meetings on that and, like I say, we did get good cooperation, we've talked to the Bureau of Automotive Repair, they had two representatives there, and I'm just waiting for some of the feedback to come back before I can really have anything of substance to report to the Committee on those issues.

that. But with regard to the other items, we haven't had

CHAIR KRACOV: Remind us, Rocky, what is your timeline in terms of trying to get some work product and complete our report by the end of the year, what is the timeline of moving forward that you see on the preparation and drafting of our report?

MR. CARLISLE: Typically we try to have a draft by September.

That gives us some time to get comments on the draft, assimilate those comments into the report, if they're relevant, and then deliver it to the legislature by November. That's been the typical timeline we've used.

CHAIR KRACOV: Mr. Heaston, is there anything that you wanted to go through? You've put together this summary of the SIP measures here. I don't know if you wanted to discuss that or if this was just for our files so we had an idea of what's coming forward.

MEMBER HEASTON: It's just basically a summary so that Rocky - I felt like when we write the report, that there needs to be some reference to what we're talking about in terms of the commitment to the SIP and what we're looking for in reductions, what are the future things and that sort of thing, so when you go to put the meat around it, it'll make it a little bit easier for that section. Otherwise it's complete.

CHAIR KRACOV: Thank you. On the topic of how we're going to fill the shoes of Ms. Lamare on the Smog Check Stations

Performance and whether that or other places is the best fit for our new Committee Member, obviously, Dean, you have a lot of experience in the program, I think in particular, probably as good or better than anybody on the issue of the future directions of the program than anyone sitting here.

I don't know if you have any particular thoughts on which of

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that?

these breakdowns really interest you or whether you are enthused to look at this one on the Smog Check Stations Performance. I don't know if you've thought about it or if you have any comments at this time.

MEMBER SAITO: Really, it's - I have interest in a lot of them, but I'll be more than happy to take over where Jude had left off on the Smog Check Stations Performance, but I do - I do have interest, of course, in the Future Directions and the SIP issues.

CHAIR KRACOV: Yeah. Is everybody on the Committee comfortable with -

MEMBER HISSERICH: Well, if I may, Mr. Chairman - John Hisserich - I was going to suggest that I could switch with Dean and I could work with Jeff on the Performance issue and the Future Directions I know is something that for many reasons he's very involved with, so with your permission and with his acquiescence, we could switch that if you think that would be useful.

CHAIR KRACOV: And for the Committee's reference, I think Tab 6 has the current assignments. Dean, what do you - Mr. Saito, what do you think about that issue? Would you be amenable to that?

MEMBER SAITO: Sure, that'd be fine with me.

Rocky, do you have any comments or thoughts on CHAIR KRACOV:

- MR. CARLISLE: No, that would work out fine.
- 2 | CHAIR KRACOV: So we could switch those two.
- 3 | MR. CARLISLE: So Mr. Hisserich would go to the chair's
- 4 | position.

- 5 | MEMBER HISSERICH: Well, you know, I don't mean to be I can if
- 6 | you want me to, or Jeff can, I don't either one. I don't
- 7 know what's the incentive either way?
- 8 | MR. CARLISLE: The reason I mention that is because Dr. Williams
- 9 is kind of tied up on the data analysis, the day-to-day
- 10 stuff, so -
- 11 | MEMBER HISSERICH: Okay, so I'll do the big picture -
- 12 MR. CARLISLE: I thought it would just distribute the workload
- a little more evenly.
- 14 | MEMBER HISSERICH: Okay, fine.
- 15 | CHAIR KRACOV: And then Dean would be moved over to Item 3,
- 16 | Future Directions of Smog Check. And then maybe we could
- talk amongst ourselves. I wouldn't be opposed to having
- Dean take the leadership on that since he's so well-versed
- in those issues. Maybe we can talk about that and get back
- 20 to you next time for that, Rocky.
- 21 | MR. CARLISLE: Okay.
- 22 | CHAIR KRACOV: Also, for reference, our incentives subcommittee,
- can you please identify if there's a chair of that and who's
- 24 || sitting on that?
- 25 | MR. CARLISLE: Yes, that's Mr. Hotchkiss and the other two

members are Roger Nickey and Dennis DeCota.

2 | CHAIR KRACOV: And it's okay to have the three on that, Rocky?

MR. CARLISLE: Well, it's only okay because we notice that

meeting.

5 | CHAIR KRACOV: I see, okay.

MR. CARLISLE: We conduct that meeting with a formal ten-day

notice.

CHAIR KRACOV: Okay and so you'll be careful to observe those formalities if you need to on this.

MR. CARLISLE: Absolutely.

CHAIR KRACOV: But I think all the Committee believes that that's a really important aspect, Bruce, and you can really make a lot of progress and it's an area that I think many believe could use some exploration and some good ideas. So I think we're really looking forward to your work on that. Is there any other discussion at this point from the Committee on Item No. 10? Seeing none, anyone from the public like to comment on Item No. 10? Okay, seeing no hands - oh, Mr. Ward.

MR. WARD: Mr. Chair, Members, Randall Ward, California

Emissions Testing Industries Association. Thank you and good afternoon. I guess clarification, I'm a little bit confused as to what the difference in the charge of the two committees, i.e., Performance and Incentives, is. The incentives is really based on a lot of work that is

associated with performance and there's a number of answers that we're looking for and many of which have to come from the Bureau before much of that work can be completed and I'd rely on Mr. Hotchkiss and Mr. Nickey to make comment there, but I think much similar to performance measures, I think the two are very much linked and would have a difficult time in either case of moving forward without the other. Thank you.

CHAIR KRACOV: Thank you for your comment, Mr. Ward. Mr. Peters?

MR. PETERS: Mr. Chairman, Committee, I'm Charlie Peters, Clean
Air Performance Professionals, a coalition of motorists. In
regards to the subcommittee, I am confused at having the
Bureau of Automotive Repair on the subcommittee when it's
the Committee's job to evaluate the program and having the
Bureau of Automotive Repair taking two seats on that
subcommittee somehow or another doesn't sound like the right
thing to me. And previously, there was a subcommittee
formed and I was under the impression that the findings of
that previous subcommittee was that a subcommittee required
having people on the committee and not somebody from the
outside, which seems to be what's happening there. So I
would, Mr. Chairman, I would like to get some clarification
on what the appropriate policy is on this regard. Thanks.
CHAIR KRACOV: Thank you, Mr. Peters. Any other comments from

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the public on this agenda item? Mr. Trimlett? MR. TRIMLETT: I again agree with Charlie, believe it or not. You can't have a member on the subcommittee that's on the main Committee. How can BAR people - BAR representatives be on that subcommittee if they're not on the main Committee? I think you need to rethink the constituency of that subcommittee.

CHAIR KRACOV: Thank you, Mr. Trimlett. Any other further public comment? I think there were some concerns - I think there were some concerns raised that are worthwhile to The first, Rocky - I know Jeffrey has a comment, too, let's go to Jeffrey first.

MEMBER WILLIAMS: No one from BAR is on the subcommittee. three of us are on the subcommittee and people from BAR attended their noticed meeting. There's nothing improper about that whatsoever.

CHAIR KRACOV: Could you speak into your mic, please? MEMBER WILLIAMS: There was nothing improper. They're not on they attended a meeting, the people from BAR.

CHAIR KRACOV: Were they Committee members?

MEMBER WILLIAMS: No.

CHAIR KRACOV: Well, I don't go back and forth. There are two topics that I think are worthwhile - two topics that are worthwhile to discuss. Perhaps there's a little bit of confusion, Rocky. The first is sort of in your own view, do you view the Incentive subcommittee as having a different goal as opposed to the Smog Check Stations Performance subcommittee and maybe you could explain that so we can clear up any confusion.

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MR. CARLISLE: Yes, with regard to the subcommittee or task force, whatever you want to label it, that involves all stakeholders and that was the idea to involve as many stakeholders as possible so that before you go forward with recommendations, you have an idea, you know, what people are going oppose and what they're not. For example, you know, if we have two subcommittee members that just represent pick an entity, for example, consumers; they're going to have a totally different idea of what they want in a Smog Check program than would two technicians working in a Smog Check station or two administrations of an I/M program. the idea was to include all the stakeholders in these discussions and see if we couldn't build consensus in some of the ideas we've come up with. And so that was the focus of this first meeting was really to kind of introduce the stakeholders and get an idea of where we wanted to go with That task force is probably what we should call it, but it's something that's done all the time. A task force doesn't have to just represent members of this IMRC.

CHAIR KRACOV: And just to clarify on this in Incentives task force/subcommittee, we have IMRC Members are the

subcommittee and they just happened to call a meeting where others were invited; is that correct?

MR. CARLISLE: We've included other stakeholders in the task force, if you will, yeah.

CHAIR KRACOV: Okay, that's the first topic. And the second topic in response to something that Mr. Ward raised, Item No. 2, the Smog Check Stations Performance, and then Item No. 6, which is our new Incentives subcommittee, do you see those as being different and distinct and why?

MR. CARLISLE: I do, only because the subcommittee includes all the stakeholders involved in the analysis in coming to some kind of conclusion on what we feel incentives might be, whereas the Smog Check Performance, we've talked about other data analysis that would not include this subcommittee. And while I'm not disagreeing, I mean, they are certainly intertwined, but I don't think they're identical, so I don't totally disagree with Mr. Ward on that, but I think they are separate for the purposes of this discussion, you know, in trying to reach some kind of, like I say, a consensus on the incentives - or performance measures, I'm sorry. Let me phrase it that way.

MEMBER NICKEY: Well, it's my understanding that station performance is as yet to be determined. That's being studied by Sierra Research. The incentives were to incentivize, supposedly technicians and stations that do

CHAIR KRACOV:

good things, not necessarily related to the station performance, as I understand it, that's being evaluated by Sierra Research and has not yet been determined.

Thank you, Mr. Nickey. Mr. Hisserich?

MEMBER HISSERICH: Well, just to clarify, I think on the issue of who participates in what, I can tell you from another State committee I sit on, they have task force meetings all the time, just as we do, to address issues in which there are stakeholders, as you correctly point out, that have many points of view and to think that all wisdom resides in the group of us here or even any subset of two of us is maybe the term subcommittee is a little misleading, because that would imply it's only members of this. I think properly we could call them task forces, but I think as you point out, as long as they're open public meetings, folks should be there and put their two cents' worth in because that's the way we advance, rather than just talk to ourselves.

CHAIR KRACOV: Thank you, Mr. Hisserich. So we have our six subcommittees and I urge everyone to get to work on them.

That includes myself, certainly, so that we have a good, robust discussion on these topics throughout the summertime.

Any other public comments on this agenda Item No. 10? Okay, seeing none, that matter is closed. Oh, I didn't see you, Charlie.

MR. PETERS: Just to add an additional small clarification,

Charlie Peters, Clean Air Performance Professionals. It appeared as though, as a casual observer, that there were some people who were, quote, a part of the committee, and some people who were not. And there were two people in the audience that were not even a part of it and they kind of had to basically keep quiet until such time as the people who were a part of it - you know, having an open process and having people attend the meeting, having the Bureau of Automotive Repair attend the meeting and make comments, I've got no problem with that at all, but if you're going to set up an infrastructure which decides who can talk and who can't, who can get recognized and who can't, and we're going to have a specific structure, then that's not what's making sense to me, so I'd just say that in passing to somewhat clarify my position.

CHAIR KRACOV: Thank you, Mr. Peters. With that, we'll close agenda Item No. 10.

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CHAIR KRACOV: And we'll move on to agenda Item No. 11,

Executive Officer's Activity Report for May of this year.

MR. CARLISLE: Thank you, Mr. Chairman. As far as the Activity

Report, a lot of it we've already talked about. I've been

organizing this meeting, obviously, but some things that

aren't in here, for example, next week I will be going to

I/M Solutions which is meeting up in Portland, Oregon, where

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I/M administrations congregate so to speak and talk about the various programs in other states and it's just an open exchange, if you will. They don't allow anybody for most of the meetings, other than government people in those meetings, so it's somewhat tightly controlled, but they do have several meetings where they allow vendors and other members of the public into the meeting. So that will be the  $3^{rd}$  through the  $6^{th}$ , then I'll be returning on the  $7^{th}$ , so I will be out of town for a couple of days. I should also mention, too, I've got a couple of short trips planned, so if I'm not immediately available in the office, I will be available on my cell, just so you know. And other than that, I've just been getting ready for the next two meetings now because with the task force, if you will, and the IMRC meetings, those are two formal meetings that we have to put out notices for, so it increases the workload, but I think it will have a work product that will make sense when we're done with them. So that pretty much concludes my Activity Report.

CHAIR KRACOV: Rocky, at the last meeting - this is Gideon

Kracov, we went through some draft procedures for our

Committee, you were going to review those with our legal

counsel, Mr. Chang. Can you give us an update on where

those stand? I'd like to have those completed and approved

and adopted as soon as we can.

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MR. CARLISLE: I'm still working on taking the edits. adding some other issues in there. For example, there's a little bit of confusion in the last two days with regard to who could actually swear in a new committee Member. told I had the authority to swear in a Committee Member, then it was determined by legal counsel, which I got that message about 8:00 this morning, that I could not swear in a Committee Member, so that presented a little bit of a problem when we were trying to get Mr. Saito sworn in this morning prior to the meeting and that's why I had to send Mr. Saito down to a local bail bondsman who also happened to be notary publics to get him sworn in. so that's going to be in there as well, the process, you know, just some of the processes that we use. So, but I am - like I say, I am revising that and I will be getting it over to Legal for his review, so.

CHAIR KRACOV: I've got just a couple other little items. Again, this is Gideon. I'm not sure (inaudible) for Mr. Saito, but I'm wondering, each of - a new board orientation - a new Committee Member orientation, I think that a lot of the folks went through that when we first came on. wondering if Mr. Solorzano has undertaken that and whether if not, whether you plan to do that for him.

MR. CARLISLE: Yeah, that's been - basically I pass on that information, I will be passing on the next class to Mr.

Saito as well. There's Ethics orientation that consists of a videotape they have to watch and sign a statement, so there's a couple little issues they have to take care of, plus believe it or not, we're coming up on the two-year mark that all the Committee Members will once again have to complete the Sexual Harassment training via the Internet and they're already contracting for that once again, so I think most of the Committee Members have been through that. If you work in another State agency, you've probably been through that, but we will all have to go through that once again.

CHAIR KRACOV: Yeah, and that's - thank you for that. But I was also referring to the briefing that you gave the new Members on Smog Check specifically, if you recall that, and I don't know if Mr. Solorzano's gone through that, but I would really recommend - I know he's not here today, but -

MR. CARLISLE: Yeah, I think we call that Smog Check 101.

CHAIR KRACOV: Right.

MR. CARLISLE: That we did down in L.A. a number of years ago.

Yes, I can do that.

CHAIR KRACOV: I found that helpful and I think it's very - I

mean, I'm not sure -

MR. CARLISLE: That won't be necessary in Mr. Saito's case, but possibly Mr. Solorzano's case.

CHAIR KRACOV: Anything further from the Committee on Rocky's

report, Item No. 11? Anything from the public on agenda 
Item No. 11? Okay, seeing none, that agenda item is closed. --000--

CHAIR KRACOV: I'd like to move onto the next item, Legislative
Update and Committee Discussion.

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MR. CARLISLE: You have a spreadsheet under Tab 7 and essentially this is just a recap of the current legislation that would impact Smog Check. If you notice, I removed the column that once before said support or oppose since we have an opinion from our DCA legal counsel that we should take neither position. Having said that, one thing I noticed, for whatever reason, I did a sort by these, but Excel is kind of funny when you have an alpha prefix in front of a number, although it sorted most of these, it put AB1488 ahead of everything else. But if we start with AB1488 by Mendoza, that's essentially a pilot program that, should it pass, then the Bureau of Automotive Repair would have to implement a pilot program to test lightweight duty diesel vehicles by January 1<sup>st</sup> of 09. And again, I emphasize lightweight diesel vehicles. It wouldn't include heavyweight duty vehicles. AB217 is the Biennial Vehicle Registration and there's actually two of these that are similar; one is a biennial vehicle registration, the other is an option that offers motorists a five percent discount. So AB217 would require essentially that the DMV adopt a

biennial registration process. That would problematic for other legislation that is trying to implement an annual Smog Check test, so there are some issues with that bill, but currently that's in the Revenue and Taxation Committee. The hearing's been postponed and that's really all I know about that bill.

CHAIR KRACOV: Rocky, I think Committee Member Hisserich has a question.

MEMBER HISSERICH: Quick question, I wonder if on that one, since they were proposing going to two years and it's in Revenue and Tax, would they double the fees and just -

MR. CARLISLE: I think -

MEMBER HISSERICH: Same amount of money, just less often.

MR. CARLISLE: Yeah, right, and so that would really be a hardship on some people. You know, you think of the low income that they can hardly in some cases afford the annual tax, much less a two-year tax. AB218, Late Smog Check Fees. That's a result of our report last year by Saldana and of course that would basically allow the DMV late fee to continue to accrue, even though the motorist had paid their registration fees, until such time as they completed their Smog Check certification. And that appears to be moving through. It's already in the Senate, so we'll keep tabs on that one. AB255 is Smog Check Abatement Fee Increase.

That's currently held in suspense in Appropriations. Once

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again, that would include the - or increase the Smog Check abatement fee from the current \$12 to \$16 on new vehicles. And that would fund the Clean Air and Energy Independence AB474, that's the Biennial Registration Option and Fund. this would given motorists essentially an option, if they wanted to opt in to a biennial registration, they could do and by doing so they would also save five percent. notice it's in the basic registration fee, so what that five percent would amount to, it's hard to say. The second page of that sheet also provides a listing of those in support and opposition to these bills. So moving on to AB616, the Annual Smog Check Inspection bill, that's another one of our recommendations and that was sponsored by the Sacramento Metropolitan Air Quality Management District. currently in suspense in the Assembly, however, I understand that it's going to move out of suspense this next week and there's going to be some amendments with that bill. I'm not sure, Mr. Sherwood, I think - is Mr. Sherwood still here? No, he's gone. He's from the Air Quality Management District. He might be able to enlighten us as to what the amendments to the bill would be. AB619, that's the Vehicle Registration Amnesty. If you recall, a couple years ago, we had a Mr. Robert Morgester provide a presentation with regard to hotrod vehicles and their ability to get out of the Smog Check program simply because they change the date

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of the vehicle. And some of these vehicles were worth a lot of money, they really should have been in the Smog Check program and he's actively prosecuted some of the vehicle owners of these vehicles. But this bill would essentially offer an amnesty to those owners and there are some In fact, Mr. Addison would like to discuss this at the conclusion of our update here with regard to this particular bill because there have been some amendments in Notice it's also held in suspense, but I also understand that, too, it's coming out of suspense this week. Another new one is AB829. That has to do with aftermarket parts for motorcycles. Now, one might not thing that has anything to do with Smog Check, but given the SIP, they have discussed including motorcycles into the Smog Check program. In what manner, that's hard to say, but essentially this would be kind of the first shot at that. It would allow aftermarket parts to be installed on motorcycles, but those aftermarket parts would have to be approved, just like automobile parts are now, by the Air Resources Board. example, right now if you modify a new vehicle, for example, maybe you want to install a turbo charger on it, you can do so provided there is what they call an executive order number issued by the Air Resources Board. If it's an approved part, you can put it on. And amazingly enough, there's even nitrous oxide systems you can put on vehicles

components you can install on cars really runs the gamut, but this is applying only to motorcycles in this case. AB99, that's the Vehicle Pollution Control for Alternative That failed passage of the Transportation Committee, however they have reconsidered. They have granted reconsideration of that bill so that would probably be going before the Committee again. And last - well, two Senate bills actually, SB23, that's the one that's been around for awhile with regard to high-polluting vehicles in the San Joaquin Valley. That's going to be a pilot program where they want to replace those high-polluting vehicles with donated vehicles and right now that's in Appropriations. And finally, SB531, I listed that, when I first read it I thought it might be a bill, but it looks like this is a spot bill for who knows what, but basically right now it's - the intent of this bill would be to enact legislation, reform the regulation of emissions of toxic air pollutants. was so brief, I'm sure that's a spot bill and who knows what that's going to morph into. And that concludes the update on legislation.

CHAIR KRACOV: Mr. Hotchkiss?

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MEMBER HOTCHKISS: Yeah, Rocky, I'm a little bit confused by AB829 because there are any number of motorcycle parts now that have executive order numbers and the Vehicle Code now,

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and you buy a new motorcycle, my son did this not too long ago, it didn't even leave the showroom in a stock condition

before the manufacturer's representative was modifying the

as always, has made it illegal to make modifications to

MR. CARLISLE: I think to the extent that right now if you go in

emissions systems of motor vehicles, of which motorcycles

MEMBER HOTCHKISS: But that is illegal now.

are included. What does this bill change?

MR. CARLISLE: Technically it is. They didn't have any options, they didn't have any other inroad, if you will, they didn't have an approved part system, so I think this just formalizes that approved parts system for motorcycles in that they do anticipate motorcycles being brought into the

Smog Check program, at least in the SIP recommendations.

MEMBER HOTCHKISS: Yeah, but my point is that ARB has a huge list of approved parts -

MR. CARLISLE: But I don't know that -

MEMBER HOTCHKISS: - primarily for Harleys that are there now that have executive order numbers. So I'm - I mean, it doesn't seem to me that this bill does anything other than what is already being done.

MR. CARLISLE: I haven't done the bill analysis on it, to be honest with you, so -

MEMBER HOTCHKISS: Yeah, I'm not asking you to defend the bill.

I'm just - it really confused me because it seems like it's a bill that simply restates what's already law and it doesn't make a lot of sense to me. Thank you.

CHAIR KRACOV: And your son's not happy for you bringing him up in this discussion, Rocky, I don't think. Anything further from the Committee on this legislative update? Did you say you had something someone wanted to talk on something, Rocky?

MR. CARLISLE: Mr. Addison, I think, wanted to discuss AB619.

CHAIR KRACOV: Okay, well, we'll open public comment. Please,

Mr. Addison.

MR. ADDISON: Good afternoon, I'm Tom Addison with the Bay Area
Air Quality Management District. I'm here to share some
thoughts on AB619, but before I do, just to answer your
question, Mr. Hotchkiss, what's illegal to do under current
law is to take - for the dealer to take prior to sale an
ARB-approved motorcycle part with an executive order and put
it on the bike and then sell it to the customer. That can
only happen currently after the sale, so that's why
motorcycle dealers are pushing that legislation. From an
air quality perspective, at least at our agency, it's not
something of concern to us, we don't see emissions
consequences of that. So the committee had a presentation,
I think three years ago, from Mr. Morgester that was alluded
to dealing with the issue of fraudulently titled vehicles.

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And for those of you who maybe weren't here or don't recollect that conversation, essentially, Mr. Morgester thought that over 70,000 vehicles in the state had been fraudulently titled, many of them specially constructed, really for three reasons. The primary reason to avoid the requirements of the Smog Check program, but also to save money on sales tax by having the vehicle value, the vehicle sale amount being less than was stated, and also to save money on registration fees by having the vehicle value being less than what was claimed per title. AB619 is a bill authored by Mr. Emerson that would essentially grant amnesty to those fraudulently titled vehicles. As a condition of that amnesty, all back fees and taxes would have to be paid. From the perspective of any air district concerned about emissions and public health, our concern has to do with the current BAR policy on specially constructed vehicles. November of 2005, the Bureau of Automotive Repair, with the involvement of SEMA adopted a policy on specialty constructed vehicles. That policy is on their website, it's how the world operates today. And I learned of that policy recently as actually as a result of doing research on AB619. My concern is that policy appears to be in direct conflict with the Vehicle Code, Section 4750.1 of the Vehicle Code, and that section of the Vehicle Code deals with specialty constructed vehicles. That section of the Vehicle Code is

the result of SB100 and SB1578 dealing with specially constructed vehicles, bills that were authored by Senator Johansson, bills that my agency was involved in negotiating amendments to and that section of the Vehicle Code, 4750.1 is the section that resulted, but appears that BAR is - (timer) oops, looks like I'm out of time.

CHAIR KRACOV: Anybody else from the public want to talk about this particular agenda item? Okay, seeing none, I don't know what to tell you, Mr. Addison. Is it proper to have him come up again for another three minutes, Rocky? Do you wish to make a longer presentation or did you come all this way for the - okay. The Committee wishes to hear him out? Okay, so why don't we extend your time period for an extra two minutes.

MR. ADDISON: Thanks, I'll be brief. I didn't realize the clock was ticking. So my concern is that the Bureau of Automotive Repair has got a policy that is directly in conflict with State law. The implications of that policy currently are not good from an emissions perspective, but the consequences of that discrepancy between law and policy present a huge potential legalization of excess emissions if AB619 passes. So that policy, in conjunction with this bill, AB619, if it were to pass in its current version, we would have major air quality consequences and dramatically weaken the integrity of the program. So that is our concern.

CHAIR KRACOV: A comment from Mr. Williams.

MEMBER WILLIAMS: Could you elaborate on why it weakens? Is it because they won't be - they'll be exempted from Smog Check, to put it bluntly?

MR. ADDISON: Not quite. Here's - here's the way things work for specialty constructed vehicles in statute and the way they work under current BAR policy. (recording ends)

Tape 3 of 3 - Side B

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MR. ADDISON: - statute and under policy, the first 500 specialty constructed vehicles per year are essentially the Wild West. Anything goes from an emissions perspective. Not quite, but essentially the first 500 specialty vehicles registered in a given year are in effect exempt from the Smog Check program. But the 501st vehicle - and every year, the first 500 vehicles, the slots for those are taken like that, within the first hour, usually of the first day of the year. So there are a lot of specialty constructed vehicles, but the 501st and subsequent vehicles under statute are required to meet emissions requirements of the year in which they register. So if I'm coming in today with a specialty constructed vehicle and I don't get one of the first 500 get-out-of-jail-free passes and I'm 501st in line, I have to meet 2007 emissions standards. However, under current BAR policy, that's not the case. Under current BAR policy, it's not the Wild West, but it's a much more relaxed standard.

If I'm a specialty constructed vehicle, if I'm 501 or 502, etcetera, and I've got a car with an '83 engine in it, I don't have to meet 2007 standards, I have to in effect meet '83 emissions standards. And so the fact that you've got somebody who presented to the Committee three years ago, Mr. Morgester, who said that there are over 70,000 of these vehicles who largely did this specifically to get around the Smog Check program, under this current policy, the emissions from those vehicles that will legalized under AB619 are substantial. It's a little bit of an arcane subject. I hope that makes sense.

CHAIR KRACOV: Anything further, Mr. Williams? Okay. Thank you very much.

MR. TRIMLETT: AB619 resulted from the very simple fact that you didn't know what year to register it as. I'll give you an example. Let's say I'm going to build a 1934 pickup truck with a crew cab, okay? Let's assume I go out and buy all those parts. Everything is a manufactured part, okay? I have nothing on that vehicle to establish that it was a 1934. If I put a 2007 engine in it, I've got to meet 2007 standards. But supposing instead I build everything new, but I put a late '50s flathead engine in it, or a nail head. They didn't have any emissions standards, they didn't have any requirements for emissions controls. But if I put that new engine in it, do I have to have every single piece of

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smog equipment on it that that new engine has? That is what is not specifically documented anywhere with respect to building that custom vehicle. That is why the title's unlimited issue came about because the State Vehicle Code and Health and Safety Code do not tell you - do not document enough. If I were to build that '34 pickup truck, just to have enough documentation, what's got to go on that vehicle? Is it the engine that decides the year or is it the chassis or is it the frame? What is it? Tell me, give me some documented guidelines that makes sense about what I've got to put on that vehicle. I think you'd make a lot of people happy, but I still don't see that in the bill as it's written. I think it's - I think it's missing something and I think you hear that from a lot of hot-rodder out there. Thank you.

CHAIR KRACOV: Thank you, Mr. Trimlett. Any other comments on this agenda item, agenda Item No. 11? Seeing none - Rocky, do you have a comment?

MR. CARLISLE: Not on this topic, no.

CHAIR KRACOV: On this agenda item?

MR. CARLISLE: Previous agenda item.

CHAIR KRACOV: Okay, well, maybe we can talk about that maybe in the future agenda items perhaps. That being said, we'll - Mr. Saito, do you have -

MEMBER SAITO: (inaudible - mic not on)

CHAIR KRACOV: (inaudible - mic not on)

MR. COPPAGE: I'm very good, thank you. Alan Coppage, Bureau of Automotive Repair. Yes, the sequence numbers that are issued through the Department of Motor Vehicles do apply to the vehicle owner allowing - or vehicle owner allowed to determine what year the vehicle will be registered as.

However, contrary to the gentleman that was up here before, the 501<sup>st</sup> and 502<sup>nd</sup> vehicles, those are determined based on either VIN number that's assigned to the vehicle in a subsequent title that's with it, an original title, or in the case of a special construction vehicle, if that vehicle does not include a VIN number, it must be blue-tagged by the Highway Patrol and that is considered a new construction vehicle. So it would be a 2007 today and it must conform to a 2007 emission control components as inspected by the referee.

MEMBER SAITO: From a historical standpoint, do you know year after year, have those 500 allotments been taken up every year?

MR. COPPAGE: Oh, very quickly, yes.

MEMBER SAITO: Very quickly.

MR. COPPAGE: Very quickly, usually within the first or second day.

|| CHAIR KRACOV: Mr. Hotchkiss, do you have a comment?

MEMBER HOTCHKISS: I thought on specialty constructed vehicles,

although the vehicle, once it's assigned a VIN by CHP, it would be titled as for the year in which it was first registered, but the emissions are based off the engine, aren't they? So if it had - if you had a specialty constructed Model T, you know with a T-bucket, and it was all aftermarket. The vehicle would be a 2007, but if it had a '61 283 in it, didn't they - when did that change, because that's the way it was.

MR. COPPAGE: I can't give you the date. I'd have to verify each - because each of these special constructions are different in that situation. But I would have to verify that to find out when that -

MEMBER HOTCHKISS: And - yeah, and where is it written and is it a policy, is it a regulation or is a law? And I think the gentleman from the Bay Area was basically saying that it's just a policy and that there is a difference between the policy and the written law and I guess that - if we can get that cleared up, that would answer a lot of the questions.

MR. COPPAGE: I would have to research that before I could speak to them.

MEMBER HOTCHKISS: Yeah.

CHAIR KRACOV: You could bring it up at the BAR update next time or perhaps our legislative discussion on the future -

24 MR. COPPAGE: I'd be happy to.

CHAIR KRACOV: Thank you, Mr. Coppage. Mr. Peters?

1 MR. PETERS: I'm beginning to sound like I keep saying the same 2 3 4 5 6 7

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thing over and over, I guess, that probably is always true. But Mr. Chairman, I believe the comments from the Committee historically have gone through the Chair and not just drilling people standing at this podium and I would certainly like to know how we're going to do this in the future. These meetings have always been ran as going through the Chair.

CHAIR KRACOV: Thank you, Mr. Peters. Anything further on this agenda Item No. 12? Okay, seeing none, that agenda item is closed.

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And we'll go onto Agenda Item 13, which is Public CHAIR KRACOV: Comments within the general jurisdiction of this body. Are there any such general public comments at this time? Ward?

Mr. Chair and Members, Randall Ward, California MR. WARD: Emissions Testing Industries Association. I'm sorry for bringing this up again, but I still have some confusion on the issue performance and incentives and I think there may be a way out of this, but there were at least two items, and let me give you an example so it might give you a perspective on my source of confusion here, that were discussed within the context of recommendations that conceivably would be made by the IMRC if they agreed with

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the Committee and obviously that is a big leap of faith because the Committee has not agreed on anything and there is a lot of work to be done. But two items in particular would require legislation, they'd require a lot of work by the entire Committee, because they would be potentially fairly volatile issues. One would be changing the licensing mechanism for auto repair dealers. The other would be making significant changes to the enforcement mechanisms in the form of a mutual settlement agreement. Now, I bring this up because this is going to require a lot of work on the part of the Committee and the Members of the task force that are - have agreed to bring back specific information so the Committee can digest and the stakeholders can participate in a meaningful discussion. I think it's particularly important that the Chair of the IMRC and the audience and the rest of the IMRC be briefed on the activities of that committee on a regular basis and I would say specifically on a monthly basis. The reason being is I don't think either the Committee, and certainly not myself that's participating, want to go to a lot of time and energy if the full Committee does not buy into at least the subject that is being worked on by the subcommittee. And I also think that, once again, that it does have a direct relationship to the performance side, so there is a clear linking there. Secondly, I also think that clearly it's the

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discussion of the day is greenhouse gas and there are - the transportation sector is certainly a major contributor to greenhouse gas and maybe Mr. Heaston and Mr. Saito would have some thoughts on how the IMRC could constructively participate within the context of the I/M program and Bureau and Air Board policy with regard to greenhouse gas. Thank you.

CHAIR KRACOV: Thank you very much for those comments, Mr. Ward.

Any other public comment?

MR. PETERS: Charlie Peters, Clean Air Performance Professionals, representing a coalition of motorists. still am quite confused as to exactly how the Committee is going to look at this subcommittee or coalition or whatever and I certainly agree that it's very important stuff. when I attended it and got an opportunity to speak, I said, well, I says I think one of the primary first things necessary is defining what you mean by performance. Performance of what? What does that mean? Can you define And so if we're going forward with this and this is really important, I haven't heard any decision as to whether the status is still where we're going at this point is appropriate or not and what we're going to do about that. We've had a considerable discussion today about remote sensing, we've had - I've mentioned ad nauseum the issue of finding out if what's broken on a car actually gets repaired

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and that that could be a huge benefit to the Smog Check I'm still going to hammer that home and say that I believe that can significantly Smog Check performance, a pilot study could be done on that in a very short timeframe and show how much that would affect the performance of the program and I think it's critically important, so I'm putting it on the record. I've continued to ask this question, if we can do better, we can empower the most important of this process, if the smoo technician that does the job, the stuff between his ears, and allow him to do his job instead of requiring him to fraud and cheat by primarily using consumer complaints, the Bureau of Automotive Repair has never, ever found out if what's broken on a car gets repaired and I think we need to change that and find out if in fact we ever do our job and if we can make it better. Thank you, Mr. Chairman.

CHAIR KRACOV: Thank you very much for those comments, Mr.

Peters? Any other comments at this time? Okay, seeing

none, we're going to close public comment for this meeting.

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CHAIR KRACOV: And move on to agenda Item No. 14, which is

Future Agenda Items. I guess we can talk a little bit about

our June meeting, Rocky.

MR. CARLISLE: Yeah, one thing I just want to bring up real quickly, in the back under Tab 8 of your handout, there's a

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number of letters that we both received and I responded to. I just want to make the Committee aware of a couple of them. For example, the first one was from Mr. Bud Rice. some confusion about a piece of legislation, so I explained that to him, but more importantly, on May 3<sup>rd</sup>, I sent a letter to the Bureau of Automotive Repair and in that letter, there are some 25, 26 questions in addition to two data requests and they will be responding to us with regard to those questions. Those were generated at the April meeting. A little bit farther back is a letter from Smog Essentially what he's suggesting here is that the Bureau of Automotive Repair neglected to investigate fraud from a Smog Check station based on a civil complaint. this was simply a civil complaint, it hasn't even been decided yet. He sent me a copy of the brief and so I sent him back a letter explaining, you know, this is only a civil complaint, it's a he-said, she-said kind of thing and that's certainly not the BAR's function to decide those, that's really a court of law. And he's assuming that because it's a civil complaint, if - even if he were found guilty, he would be found guilty in a criminal case and that's clearly not the case since the standards are different. And then there was also an email I just sent you or provided you a copy of that so you had some idea of what people are saying. And last, but certainly not least, I mentioned that we had a

number of comments and phone calls about the Incentives task force. And the very last one is from a Mr. Glassick (phonetic) - I'm sorry, it's the next to the last one. And he basically made the comment that if you find somebody in violation of the law, don't suspend their shop license, kill it. And that was from a former Smog Check station owner, so. He sent that via fax, but I just wanted to kind of make you aware of that correspondence that was going forth.

CHAIR KRACOV: And typically, Rocky, I know you forgot that, but that would usually go in your EO report?

MR. CARLISLE: Yes.

CHAIR KRACOV: Okay, good. I want to make sure it's properly agendized. I would like to have some discussion form the Committee Members on our Future Agenda Items for June. I mean, we're going to have something on RSD report, right Rocky?

MR. CARLISLE: correct.

CHAIR KRACOV: We're going to have our regular discussion on the report planning, update and discussion, and you're going to add, I would think, as F would be the Incentives group.

MR. CARLISLE: Yes.

CHAIR KRACOV: Okay. Is there anything else that we're looking to have for our meeting? Dr. Williams?

MEMBER WILLIAMS: ms. Wimberger is supposed to be producing a report.

- CHAIR KRACOV: Okay. Rocky, I'm curious. I know that there is some ongoing research. Is that with Sierra on the refail issue?

  MR. CARLISLE: Yes.

  CHAIR KRACOV: What's the status on that? Is there going to be
  - CHAIR KRACOV: What's the status on that? Is there going to be any kind of report ready for the next meeting or you don't think so?
- 8 MR. CARLISLE: I I seriously doubt it, but I will contact ARB
  9 and find out. That seems to be a long, ongoing process, if
  10 you will.
- 11 | CHAIR KRACOV: And then do you think that you're going to have
  12 | our Board procedures for the next meeting or you're not
  13 | sure?
- 14 MR. CARLISLE: I'm going to try to, yes.
- 15 CHAIR KRACOV: Okay, I'd like that. Any other comments? Dr
- 16 | Hisserich?

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- MEMBER HISSERICH: John Hisserich. How about the report on other states? Is that the -
- 19 MR. CARLISLE: We should have at least a -
- 20 | MEMBER HISSERICH: A preliminary -
- 21 | MR. CARLISLE: a preliminary update on that, yes.
- 22 | MEMBER HISSERICH: Yeah.
- 23 | CHAIR KRACOV: Anything else anybody wants to hear at the next
- meeting? Okay, seeing none oh, Dr. Williams?
- 25 | MEMBER WILLIAMS: How about something on HEP?

MR. CARLISLE: I will check with BAR again on that one.

MALE: (inaudible - mic not on)

MR. CARLISLE: Well, no, and simply because of the number of questions and the complexity of those questions, I didn't anticipate by this meeting we would have all the answers, but I certainly expect by next meeting we will have the answers. Ms. Mehl has been very forthright and forthcoming in responses, but when I sent this particular letter, I mean, I'm sure I'm on the hit list of her staff right now.

CHAIR KRACOV: It seems fairly detailed, so it may merit its own agenda item if it's ready for us for primetime on that day.

MR. CARLISLE: Certainly.

CHAIR KRACOV: Okay. Anything further from the Committee on this topic? Anything from the public, what would you like to hear for future agenda items? Anything at this time?

Mr. Peters?

MR. PETERS: Consideration of finding out if what's broken ever gets fixed on the agenda for consideration, yes, sir.

CHAIR KRACOV: Thank you very much for that comment, Mr. Peters.

No other public comment, so we'll finish up with that agenda item and I think we're ready to adjourn the meeting. Can I hear a motion to adjourn?

MALE: So moved.

24 | CHAIR KRACOV: Okay and a second?

MALE: Second.

1	CHAIR KRACOV: All in favor, say aye.
2	ALL MEMBERS: Aye.
3	CHAIR KRACOV: Any opposed? Okay, none opposed, therefore the
4	May 29 <sup>th</sup> , 2007 meeting of the Inspection and Maintenance
5	Review Committee is hereby adjourned.
6	- MEETING ADJOURNED -
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## TRANSCRIBER'S CERTIFICATION

This is to certify that I, TERRI O'BRIEN, transcribed the tape-recorded public meeting of the Bureau of Automotive Repair dated May 29, 2007; that the pages numbered 1 through 156 constitute said transcript; that the same is a complete and accurate transcription of the aforesaid to the best of my ability.

Dated June 8, 2007.

Terri O'Brien, Transcriber Foothill Transcription